







Proceedings

The 8th National and International Research Conference 2025: NIRC VIII 2025

"Directions for Local and Community Education Management in a Changing World"

> 15 February 2025 Buriram Rajabhat University





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Message from the President of Buriram Rajabhat University



Buriram Rajabhat University is part of the "Area-Based and Community Development" group of institutions. It has six core missions to respond to local communities' needs and changes, aligning with the Sustainable Development Goals (SDGs), which serve as a global development framework. Moreover, the Buriram Rajabhat University Council continuously promotes proactive strategic plans to strengthen local communities and achieve sustainable development in all aspects.

The collaborative efforts of the Graduate School, the Faculty of Humanities and Social Sciences, the Faculty of Education, the Faculty of Agricultural Technology, the Faculty of Science, the Faculty of Industrial Technology, the Faculty of Management Science, and the Faculty of Nursing, along with the Research and Development Institute and the Office of International Relations at Buriram Rajabhat University, in organizing the 8th National and International Research Conference under the theme "Directions for Local and Community Education Management in a Changing World" is an initiative that promotes, supports, and aligns with our mission and the sustainable development goals. This will greatly benefit the development of both society and local communities, now and in the future.

I would like to express my sincere gratitude to our two keynote speakers: Professor Dr. Supachai Pathumnakul, Permanent Secretary of the Ministry of Higher Education, Science, Research, and Innovation, and Mr. Eran Williams from the Regional English Language Office (RELO), US Embassy. I also extend my thanks to the Graduate School and all involved departments for their collaboration and contributions to creating valuable knowledge for society and local communities.

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Finally, I wish the 8th National and International Research Conference at Buriram Rajabhat University great success in achieving all its goals and objectives.

Associate Professor Malinee Chutopama President of Buriram Rajabhat University



The 8th National and International Research Conference 2025:

NIRC VIII 2025

"Directions for Local and Community Education Management

in a Changing World"

Date: 15 February 2025

Venue: Buriram Rajabhat University

Rationale

Buriram Rajabhat University is a higher education institution for local development, with

a primary mission to produce graduates and provide quality education according to academic and

professional standards. For more than 50 years, it has been creating knowledge through research,

innovation, and creative work to develop the local community. Currently, Buriram Rajabhat

University is classified as a university for local community development (Area-Based and

Community), ready to implement higher education budget reforms under the Re-inventing

University project and prepare for evaluation by The Times Higher Education (THE) for its efforts

to support the Sustainable Development Goals (SDGs). To achieve this mission and comply with

the policies of the Ministry of Higher Education, Science, Research, and Innovation, Buriram

Rajabhat University has set a policy to organize the 8th National and International Academic

Conference in the fiscal year 2025. This conference will provide a platform for organizations,

agencies, institutions, researchers, academics, interested parties, and the general public, both

nationally and abroad, to present and showcase research, creative works, products, inventions, and

innovations resulting from research, as well as to promote research dissemination and facilitate the

exchange of research experiences.



Situation before Implementing the Development Project (Baseline)

For the advancement of education in the modern era, Buriram Rajabhat University's hosting of national and international academic conferences is crucial. These initiatives help instructors, researchers, staff, and students from Rajabhat universities and educational institutions both nationally and abroad raise the caliber and standards of their research, creative work, and innovations. The project provides a platform for instructors, researchers, and students from Rajabhat universities and educational institutions to present high-quality research and exchange best practices for improving the quality of education in Thailand, while also disseminating research, creative work, and innovations by instructors, staff, students, and researchers from Rajabhat universities and educational institutions both nationally and abroad.

The Conference Objectives

- 1. To provide a platform for instructors, researchers, and students from Rajabhat University and educational institutions both nationally and abroad to present quality research and exchange practices in improving the quality of education in Thailand.
- To disseminate the research, creative works, and innovations of instructors, staff, students, and researchers from Rajabhat University and educational institutions both nationally and abroad.
- 3. To promote learning activities towards the development of quality and standards in research, creative work, and innovation of instructors, staff, students, and researchers of Rajabhat University and educational institutions both nationally and abroad, so that these resources can be utilized for the sustainable development of local communities, society, and the nation.
- 4. To connect high-quality research from Thailand and abroad to the intended beneficiaries on a national and international level, in terms of academics, policy, society, and communities.

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Conference Types

- 1. Keynote address by national and international scholars
- 2. Presentation of national and international research works or academic articles
 - 2.1 Oral presentation
 - 2.2 Poster presentation
- 3. The themes of the research works or academic articles are based on the following disciplines:
 - 3.1 Education
 - 3.2 Humanities and Social Sciences
 - 3.3 Science and Technology
 - 3.4 Business Administration
 - 3.5 Area-based Research
- 4. Presentation of exhibition

Date and Venue

The conference is held on 15 February 2025 at Buriram Rajabhat University, Muang District, Buriram Province, Thailand. (6th floor, Building 23, and 3th floor, Building 15)

Conference Schedule

No.	Activities	Date
1	Publicize the conference 5 October 2024 – 15 Februa	
2	2 Registration for conference participants 18 November 2024 – 5 February 202	
3	Submission of full paper and registration payment 15 November 2024 – 15 December 2	
4	Announcement for full paper acceptance 20 December 2024	
5	Submission of the revised full papers as suggested 6 January 2025	
	by peer reviewers	

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6	Submission of PowerPoint presentation file	1 February 2025
7 Conference date 15 February 2025		15 February 2025
8	Submission of full paper for publication	22 February 2025
9	Publication of full paper in online proceedings	22 March 2025

N.B.: *Articles written by postgraduate students must be approved by their advisors, and the advisors' names must also be included in the articles.

**The articles approved by peer reviewers will be published in proceedings, and can be accessed via Google Scholar.

Co-host Organizations

The co-hosts of the conference are as follows: The Office of the Permanent Secretary (OPS) of the Ministry of Higher Education, Science, Research and Innovation, Knowledge Network Institute of Thailand (KNIT), and Association of Professional Development of Educational Administration of Thailand (APDEAT). The foreign institutes are also officially invited as the conference co-hosts as follows:

- 1. Battambang Teacher Education College, Kingdom of Cambodia
- 2. National University of Battambang, Kingdom of Cambodia
- 3. Preah Sihamoniraja Buddhist University
- 4. Maubin University, Ministry of Education, Myanmar
- 5. Hebei Academy of Fine Arts
- 6. Hebei Oriental University
- 7. Guizhou University
- 8. Warmadewa University, Indonesia
- 9. Bulacan State University
- 10. Manipur University

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- 11. Savannakhet Teacher Training College, Lao People's Democratic Republic
- 12. Beijing Jiaotong University
- 13. Hue University of Foreign Languages, Vietnam
- 14. Minnan Normal University
- 15. Beijing Open University
- 16. Kollabot International School
- 17. Mandalay University of Distance Education (MUDE), Myanmar
- 18. Pattimura University, Indonesia
- 19. Royal University of Phnom Penh, Cambodia
- 20. University of Northern Philippines (UNP)
- 21. Guangxi University for Nationalities (GXUN)
- 22. Beijing Silkroad Xinyu Culture Exchange Center
- 23. Niagara University, USA
- 24. Souphanouvong University, Lao PDR

Expected Outcomes

- 1. There are at least 150 lecturers, researchers, students and those who are interested attend the conference. There will be at least 80 national research papers and 30 international research papers. The participants will gain knowledge utilized in developing research, academic works and life quality. Also, there will be cooperation among Rajabhat Universities and educational networks both from Thailand and foreign countries.
- 2. The research works, creative works and innovations can be utilized to develop the country for creating stability, prosperity and sustainability.
- 3. The quality research works can be publicized in online proceedings, academic journals in national databases or academic journals of Buriram Rajabhat University that have been approved from the University Council, and also in international journals participating as the publication sources.

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Conference Organizers

Graduate School, Faculty of Humanities and Social Sciences, Faculty of Education, Faculty of Science, Faculty of Agricultural Technology, Faculty of Industrial Technology, Faculty of Management Sciences, Faculty of Nursing, Office of International Relation Affairs, and Institute of Research and Development of Buriram Rajabhat University

Application

Applicants who want to present their research works can apply at http://nirc.bru.ac.th.

Registration

Participants must pay the registration fees as in the following rates:

1. International Conference

3,500 Baht for both Thai and foreign presenters

2. National Conference

2,500 Baht for all presenters

3. For members of the network of professional associations in educational administration and curriculum and instruction.

International Conference 4,000 Baht

National Conference 3,000 Baht

4. Participants only, without presenting their own research.

1,000 Baht for participants

N.B.: For the article conducted by many authors, only one author is allowed to make a registration. In case of being absent for presenting or not being allowed to present the research works, the applicants cannot get refund as the fee is paid for the peer reviewers. The participants who are the government officials may be eligible to get allowance from their organizations.



Methods for Registration Payments

Pay by cash with the application form at Office of Graduate School, (Floor 8, Building 15),
 Buriram Rajabhat University, 439 Jira Road, Muang District, Buriram Province, Post Code 31000

2. Electronic Bank Transfer

Account Name: Buriram Rajabhat University,

The 8th National and International Research Conference 2025 (Saving)

Bank of Ayudhya, Krungsri

Account Number: 129-1-71314-9

Swift Code: AYUDTHBK

Address: 57,57/1 Sunthornthep Road, Nai Mueang Subdistrict, Mueang Buriram

District. Buriram Province, Post Code 31000.

N.B.: Please upload a copy of transferring receipt at http://nirc.bru.ac.th after transferred.

Preparation of Research Article Manuscript

It is recommended to study the preparation of research article manuscript at the website: https://nirc.bru.ac.th. The presenters must strictly follow the article format required.

Announcement of Selected Presenters

The selected presenters will be acknowledged on 20 December 2024. The presenters must correct a manuscript according to the peer reviewers' suggestions, and then submit the correct full paper to the proceedings editorial staff within 6 January 2025.

N.B.: The correct full paper will be published in online proceedings on 22 March 2025, and it can be accessed from Google Scholar. The researcher must present the paper by him/herself in line with the schedule set. The published research works can be taken as part of graduation according to the announcement of the Office of the Permanent Secretary (OPS) of the Ministry of Higher Education, Science, Research and Innovation.



Selection of Research Works

The appointed committee of Buriram Rajabhat University reserves the right to follow the university announcement relevant to the criteria for selecting research and academic articles presented in the 8th National and International Research Conference 2025, and the University order on the appointment of Proceedings Editorial Board of the 8th National and International Research Conference 2025. The following are the criteria:

- 1. Selection of groups and type of presentation;
- 2. Selection of research works to be presented and published in proceedings;
- 3. Disqualification of paper presentation is as in the following cases:
- 3.1 Abstract, research article, or posters that do not comply with the required format and peer reviewers' suggestions;
- 3.2 The delaying registration and payment and/or incomplete registration and payment; and
 - 4. The committee's consideration is considered final.

Contacts for Further Information

Contact for further information at http://nirc.bru.ac.th and Facebook: Graduate School, Buriram Rajabhat University, or contact:

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Project Evaluation

The conference will be evaluated based on:

- 1. The number of research presenters, articles accepted for publication, and participants.
- 2. The participants' satisfaction questionnaire (Google Form).

Reporting Project Results

- Dean of the Graduate School reports the project results upon completion of the project as planned to the meeting of the Graduate School Committee, Graduate Studies Committee, University Executive Committee, and the Academic Council.
- 2. The president or representative reports the results of the project to the Buriram Rajabhat University Council Committee.
 - 3. Dean of the Graduate School reports the results to the co-host institutions.

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Conference Program

The 8th National and International Research Conference 2025: NIRC VIII 2025

"Directions for Local and Community Education Management

in a Changing World"

Date: 15th February 2025 Venue: Buriram Rajabhat University

08:00 – 09:00 am. Registration in front of Chor Rajapruek Meeting Room,
Floor 6, Building 23

Opening ceremony conducted by
Professor Dr. Supachai Pathumnakul, the Permanent Secretary,

Ministry of Higher Education, Science, Research and Innovation

Reported speech conducted by

Associate Professor Malinee Chutopama,

President of Buriram Rajabhat University

09:30-11:30 am. **Keynote address** by

Professor Dr. Supachai Pathumnakul, the Permanent Secretary,

Ministry of Higher Education, Science, Research and Innovation

11:30 – 12:30 am. **Keynote address** by Mr. Eran Williams,

Director of Regional English Language Office: RELO

12:30 – 01:00 pm. **Lunch break**

01:00 – 01:30 pm. Opening ceremony for poster presentation session

at Puttaraksa Meeting Room, Floor 3, Building 15



by Associate Professor Malinee Chutopama,

President of Buriram Rajabhat University

01:30 – 05:00 pm. National and international poster presentation sessions

at Puttaraksa Meeting Room, Floor 3, Building 15

National and International oral presentation sessions

at Building 15, Floors 7, 8, and 9

N.B.: The program is subject to change as appropriate.

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The Factors for Enhancing the Informationization Leadership of Administrators in Private Art
Universities in Hebei Province, People's Republic of China under the Digital Era

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Abstract

The objective of this qualitative and quantitative research was to create and develop the factors and indicators for enhancing the informationization leadership of administrators in private art universities in Hebei province of People's Republic of China under the digital era. This research obtained factors and indicators through literature reviews and a focus group with experts from the best practice university, which is Dalian Neusoft University of Information. The data obtained from the interviews were analyzed using the content analysis method. Furthermore, an evaluation system, which consists of 5 factors and 18 indicators, was established. The 5 factors which are founded included informationization vision cultivation, informationization professional practice, informationization system improvement, digital citizenship demonstration, and digital learning culture advancement.

Keyword: Informationization Leadership, Factors, Enhancing, Hebei Province

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Introduction

In the digital era, every part of our society has been changing, with the rapid development of information technologies, especially in the field of higher education. Private art universities in Hebei Province, People's Republic of China, are facing both unprecedented opportunities and daunting challenges as a result of this digital transformation.

With the proliferation of digital tools and platforms, the methods of delivering and managing art education have undergone fundamental changes. The emergence of online courses, virtual, and digital exhibition spaces has enabled students to transcend the confines of physical campuses, facilitating access to learning resources and showcasing their work. For administrators of these private art, leveraging the power of information technology to keep pace with the everevolving educational landscape has become absolutely essential. (Ding, 2020, p.41)

On the other hand, students who have grown up in a digital environment have higher expectations for digital learning experiences. They demand seamless access to course materials, time interaction with instructors and peers, and innovative teaching methods supported by technology. Administrators need to meet these demands to attract and retain students in a competitive education. Nevertheless, the art industry is also undergoing digitalization. Digital art forms such as 3D modeling, animation, and digital painting are, and art institutions need to equip students with relevant digital skills. This requires managers to have a clear vision and strategic planning in terms of informatization, to ensure renewal of curricula and teaching facilities. (Froelich, S., 2022, p.106)

However, many administrators of private art Universities in Hebei province are encountering obstacles in the process of informatization leadership. Moreover, limited financial resources often hinder investment advanced IT infrastructure and software systems. Additionally, there is a lack of IT professionals who understand the unique needs of art education, leading to difficulties in system maintenance. Furthermore, some administrators themselves lack the necessary digital and strategic thinking skills to drive comprehensive informatization reforms.

Due to the importance of informationization technology leadership and the current problems in the use of digital technology in organizations to increase work efficiency, the researcher is interested in studying the factors for enhancing the informationization leadership of



administrators in private art universities in Hebei province, People's Republic of China under the digital Era.

Objective

The objective of this research was to study the factors and strategies for enhancing the informationization leadership of administrators in private art universities in Hebei province People's Republic of China under the digital era.

Research Methodology

1. Target Group

The target group used in this research included experts from Dalian Neusoft University of Information, which is a university with best practices in the administration of private art universities, obtained by Purposive Sampling method. All of these experts have major background in Education, and they own a doctoral degree or a title of associate professor or above. In addition, experts are from university presidents, vice presidents or managers of secondary colleges. This criterion meets the requirements of this study.

In the Best Practice stage of this research, Dalian Neusoft University of Information sent 7 experts to participate in the focus Group. The criteria for selecting experts were below:

- 1) Work experience of 5 years or more.
- 2) Educational background in educational administration or related fields.
- 3) Position as a university administrator.
- 4) Employment at a private art university in private art universities;
- 5) Educational qualification of a doctoral degree.

2. Research Instruments

The Instrument used in this study was a semi-structured interview, with the interview subjects being a focus group from Dalian Neusoft University of Information. This university is characterized with its very rich and good practical experience, which can influence the factors affecting the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era.



3. Data Collection

The researcher divided data collection into two phases as follows:

- 3.1 Phase one involved collecting data through literature review. The researcher searched lots of literature from renowned domestic and international experts and scholars on the factors affecting the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era.
- 3.2 Phase two involved collecting data from focus group, which has best practice in informationization leadership of administrators in private art universities, namely Dalian Neusoft University of Information. The researcher asked for letters from graduate school of Buriram Rajabhat University to request assistance in collecting data. In order to synthesize the factors that affect the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era, the researcher went to Dalian Neusoft University of Information according to the appointment and discussions with the university's experts to learn the experiences about methods for enhancing the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era. After completing data collection in Phase two the researcher adjusted the factors and indicators that affect the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era, obtained in Phase one to make them more completed.

4 Data Analysis

The researcher used the method of Content Analysis to analyze data, according to the research objectives, the research results were as follows:

4.1 Factors of informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era

Through relevant literature analysis, 5 factors affecting the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era, were shown in Table 1.



Table 1

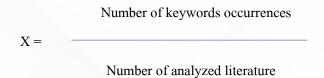
Factors Affecting the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era

NO.	Factors
1	Informationization Vision Cultivation
2	Informationization Professional Practice
3	Informationization Systemic Improvement
4	Digital Citizenship Demonstration
5	Digital Learning Culture Advancement

The main factors affecting the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era included :1) Informationization Vision Cultivation; 2) Informationization Professional Practice; 3) Informationization Systemic Improvement; 4) Digital Citizenship Demonstration; 5) Digital Learning Culture Advancement.

There were 3 steps to obtain the main factors: Firstly, list all factors that affect informationization leadership of administrators in private art universities from related literature; Secondly, based on the number of literature analysis factors and the number of analyzed literature, calculate the frequency of all factors appearing in the literature; Thirdly, selected factors with a frequency of over 50 percent as the main factors.

The formula for calculating the frequency of occurrence of factors in literature is as follows:



As shown in Table 2, there were 10 factors that affect the informationization leadership of administrators in private art universities. Finally, based on the principle of factor occurrence frequency $X \ge 0.50$, 5 b factors were selected.



Table 2

Factors Affecting the informationization leadership of administrators in private art universities in Hebei Province

NO.	Factors	Percents
1	Informationization Vision Cultivation	86.67%
2	Informationization Professional Practice	80%
3	Informationization Systemic Improvement	73.33%
4	Digital Citizenship Demonstration	66.67%
5	Digital Learning Culture Advancement	53.33%
6	Teaching Ability	40%
7	Connected learning	20%
8	Information Technology Resource Development	13.33%
9	Innovation Management	13.33%
10	Focus on Learning Outcomes	13.33%

4.2. Indicators of the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era

After confirming 5 factors affecting the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era, based on the research of relevant literature at home and abroad, the indicators were determined by content analysis method according to the principle of more than 0.5 frequency.

The frequency of occurrence ratio of indicators in Informationization Vision Cultivation factor is shown in Table 3.



Table 3

The Frequency percents of Indicators of Informationization Vision Cultivation factor

NO.	Indicators	Percents
1	Vision Establishing	92.31%
2	Vision Sharing	76.92%
3	Vision Arrangement	69.23%
4	Vision Evaluation	53.85%
5	Vision Communication	30.77%
6	Vision Cultivation	23.08%

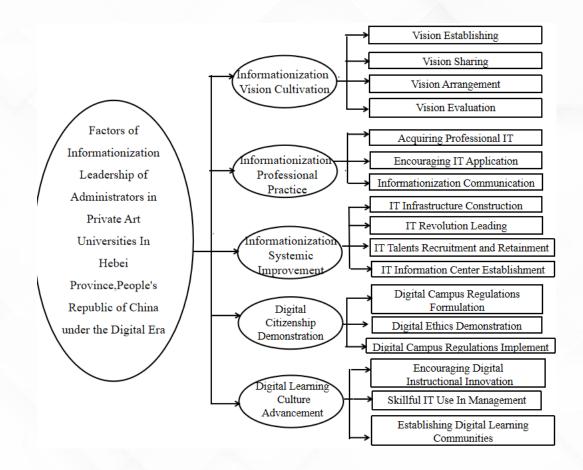
The indicators which frequency of occurrence ratio was above 0.50 were taken in the Informationization Vision Cultivation factor of the informationization leadership of administrators in private art universities in Hebei Province. They were Vision Establishing, Vision Sharing, Vision Arrangement and Vision Evaluation.

Finally, the researcher used the same methods to analyze the 5 factors and set 17 indicators as follow:



Figure 1

Factors and Indicators of the informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era, based on literature review:



4.3 The Best Practice for informationization leadership of administrators in private art universities in Hebei Province, People's Republic of China under the digital era

In this research, the researcher chose Dalian Neusoft University of Information as the object of the best practice due to the following reasons:

- 1) Dalian Neusoft University of Information has done a good job in informationization leadership of administrators.
- 2) Liaoning and Hebei provinces border each other, and their development situations were relatively similar.



In the Best Practice stage of this research, 7 experts were sent to participate in the focus group discussion.

About the factors of informationization leadership of administrators in private art universities, the experts agreed with the opinions which were proposed in this research, and the Factor Similarity were shown in Table 4. They all agreed to keep unchanged of the factors of informationization leadership of administrators in private art universities.

Table 4
Similarity of Factors in the Focus Group Discussion of the Best Practice

NO.	Factors	Factor Similarity
1	Informationization Vision Cultivation	100%
2	Informationization Professional Practice	100%
3	Informationization Systemic Improvement	80%
4	Digital Citizenship Demonstration	80%
5	Digital Learning Culture Advancement	100%

About the indicators of informationization leadership of administrators in private art universities, the experts give follow advice, and the researcher agreed with the advice as table 5:

Table 5

Advice from Best Practice of Experts about the indicators of informationization leadership of administrators

Factors	Indicators (Old)	Indicators (New)	Reasons
	Vision Arrangement	Unchanged	
	Vision Sharing	Unchanged	
Informationization Vision Cultivation	Vision Arrangement	Replaced by Vison Implement	It has a broader meaning and contains the old one
	Vision Evaluation	Unchanged	
Informationization	Acquiring Professional IT	Unchanged	
Professional Practice	Encouraging IT Application	Unchanged	

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การประชุมวิชาการระดับชาติและนานาชาติ ครั้งที่ 8 วันที่ 15 กุมภาพันธ์ 2568 / ณ มหาวิทยาลัยราชภัฏบุรีรัมย์

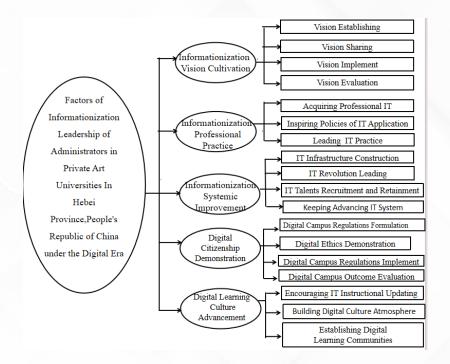
Factors	Indicators (Old)	Indicators (New)	Reasons
2	Informationization	Replaced by Leading IT	It's more applicable for
	Communication	Pratice	administrators
	IT Infrastructure Construction	Unchanged	
	IT Revolution Leading	Unchanged	
Informationization	IT Talents Recruitment and		
Systemic Improvement	Retainment	Unchanged	
	Information Center	Replaced by Constantly	System Improvement is a
	Establishment	Advancing IT System	constant process
/	Digital Campus Regulations		
	Formulation	Unchanged	
Digital Citizenship	Digital Ethics Demonstration	Unchanged	
Demonstration	Digital Campus Regulations		
D CIMOTION CIMOTIC	Implement	Unchanged	
		Add Digital Campus	Necessary step to test the
		Outcome Evaluation	Digital Citizenship
	Encouraging Digital		
	Instructional Innovation	Unchanged	
D: :: 11		Replaced by Building	
Digital Learning	Skillful IT Use In	Digital Culture	The most important part of
Culture Advancement	Management	Atmosphere	Culture Advancement
	Establishing Digital Learning Communities	Unchanged	

In combination with literature review and best practice project, factors and indicators affecting the informationization leadership of administrators in private art universities in Hebei Province were shown in figure 2.



Figure 2

Factors and indicators affecting the informationization leadership of administrators in combination with literature review and best practice project



Discussion and Conclusion

Based on the research results, the following were discussed:

- 1. In this research, informationization vision cultivation was confirmed as an important factor of affecting the informationization leadership of administrators, similar to the research by Dong, T. (2020). Based on his research on the model of informatization leadership for vocational college principals, he found that the affecting factors of *informatization* leadership were closely related to the vision cultivation of administrators.
- 2. In the results of this research, building digital culture atmosphere is obtained as a key indicator to demonstrate digital citizenship. It was similar to the research by *Hu*, *X.* (2023). Based on her research on the construction of informatization leadership models for grassroots management teams in higher education, she found that nice digital culture atmosphere is much helpful to the construction of informatization leadership.
- 3. This research highlighted the importance of informationization system improvement as a critical factor to affect informationization leadership of administrators in private art universities.



It was similar to the research by *Li*, *Y.*, & Zhang, J. (2022). Based on their research on the path and implications of enhancing informatization leadership for educational leaders in the United States, they found that informationization system improvement is the basis to enhance the informatization leadership for educational leaders.

Through the literature review and best practice on informationization leadership of administrators in private art universities, the researcher received 5 factors: 1) Informationization Vision Cultivation; 2) Informationization Professional Practice; 3) Informationization System Improvement; 4) Digital Citizenship Demonstration; 5) Digital Learning Culture Advancement. Based on the 5 factors, there are 18 indicators totally. Among all the indicators, "Digital Campus Outcome Evaluation" and "Building Digital Culture Atmosphere" were recommended by Best Practice experts. Moreover, best practice experts held a positive attitude towards both indicators.

Suggestion

Based on the research findings, some suggestions were below:

- 1. The research outcome of informationization leadership of administrators in private art universities in Hebei Province, can be used for reference to enhance the informationization leadership of administrators in other provinces' private art universities.
- 2. It was also suggested to carry out further research on the informationization leadership of administrators in private art universities in Hebei Province, empirical research can yield accurate factors and indicators, as well as a manual on how to use these factors and indicators.
- 3. The further studies should be conducted to develop strategies for enhancing the informationization leadership of administrators in private art universities in Hebei province People's Republic of China under the digital era.

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The Current Situation of Personnel Management by Educational Administrators in Hebei Province's Universities, the People's Republic of China

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Abstract

This study investigates the current situation of personnel management by educational administrators in Hebei Province's universities, with a particular focus on university faculty. According to Krejcie and Morgan's table, a sample of 375 teachers was randomly selected from a total of 12,005 teachers in eight universities in Hebei to ensure representativeness. Data were collected through a questionnaire comprising two components: a checklist and a rating scale. Statistical methods, including percentages, means, and standard deviations, were used for data analysis, while hypothesis testing was conducted using the independent samples t-test. When significant differences were identified, pairwise comparisons were performed using the Scheffe method.

The findings indicate that the overall situation of personnel management in the region was consistently at a high level, with all individual aspects also rated at a high level. Furthermore, no significant differences were found in personnel management practices when comparing faculty based on work experience or educational background. These results highlight a uniform approach to personnel management across institutions and provide insights that can inform the development of improved administrative practices in Hebei Province's universities, the People's Republic of China.

Keyword: personnel management, educational administrators, Hebei Province's universities



Introduction

Personnel management plays a pivotal role in the field of education, particularly in the knowledge economy era, where human resources have become a primary source of competitive advantage. Higher education institutions are not only critical for cultivating high-level talent but also serve as core hubs for national and regional knowledge innovation. Efficient personnel management ensures the delivery of high-quality and effective education, maximizes the potential of educators, enhances their teaching and research capabilities, and ultimately contributes to the advancement of the knowledge economy (Yan, 2022: 10). China 's educational policies, such as the 1993 Teacher Law, provide a comprehensive legal framework for managing teachers, safeguarding their rights and professional dignity while fostering educational development. As higher education continues to expand rapidly, personnel management within universities has gained particular importance. This encompasses key areas such as recruitment, training, evaluation, and promotion—each critical for improving educational quality and strengthening the competitiveness of universities. (Source from the website of the Ministry of Education of the People's Republic of China, http://www.moe.gov.Cn/jyb sjzl/sjzl zcfg/zcfg jyfl/tnull 1314.html)

However, university administrators face challenges in personnel management, including attracting and retaining top talent, balancing work and research, conducting fair evaluations, and motivating employees. The special identity and job nature of university teachers require that personnel management cannot simply apply the enterprise model, which increases the complexity of management. In addition, factors such as economic and social development, educational policy reform, and changes in the internal personnel structure of educational institutions have put forward new requirements for personnel management. (Luo, 2019: 8)

Universities in Hebei Province are gradually standardizing personnel management, emphasizing open and transparent recruitment to ensure the quality of selection; Standardized training to enhance professional skills; Assessment is led by goal management and performance evaluation, with promotion considering potential, salary linked to performance, and employee motivation stimulated (Fu, 2018: 25-26). Despite this, undergraduate colleges and universities in Hebei still face challenges in personnel management, such as insufficient transparency in the recruitment process, disconnect between training and demand, unreasonable assessment indicators, unclear promotion mechanisms, and mismatched salary systems and performance. These issues have



affected management effectiveness and team harmony, and universities need to strengthen research and continuously optimize their management systems. (Zhou, 2019: 2)

The purpose of studying the personnel management status of university managers in Hebei Province is to provide reference for managers and relevant departments, optimize and develop personnel management, and improve management effectiveness.

Research Objectives

- 1. To investigate the perceptions of teachers regarding the current state of personnel management among university administrators in Hebei Province.
- To compare the perceptions of teachers with different work experiences and educational backgrounds regarding the current state of personnel management among university administrators in Hebei Province.

Research Methodology

1. Population and Samples

This study selected teachers from 8 characteristic universities in Hebei Province in 2023 as the overall population, with a total of 12,005 teachers. The 8 universities were: Hebei North University; Langfang Normal University; Hebei Sport University; North China Aerospace Industry College; Hebei Petroleum Vocational and Technical University; Hebei Academy of Fine Arts; Oriental College, Beijing University of Traditional Chinese Medicine; Hebei Oriental University. Then, according to the sample size standard table of Krejcie and Morgan, a random sampling was conducted from the population (Krejcie& Morgan. 1970: 608-610; cited from Prasit Suwannarak. 2555:148-149), with a total sample size of 375 people, and then selected through simple random sampling.

2. Research Tools

This study distributed a total of 375 questionnaires on the current situation of personnel management in undergraduate colleges and universities in Hebei Province. The aim was to collect data and information based on the opinions of teachers with different work experience and educational backgrounds on personnel management in undergraduate colleges and universities in Hebei Province, in order to investigate the current situation of personnel management in



undergraduate colleges and universities in Hebei Province. This questionnaire is divided into five aspects: 1) recruitment management, 2) training management, 3) assessment management, 4) promotion management, and 5) salary management. Conduct content validity checks by three experts. Three experts (one content expert, one measurement and evaluation expert, and one language expert) evaluated the accuracy and adaptability of the questionnaire content through IOC assessment. The IOC (Consistency Index) values of all items in the questionnaire are above 0.5, indicating that the questionnaire meets the reliability standard with a reliability value of 0.970, indicating a high degree of consistency and reliability.

3. Data Collection

The researcher applied for the "Data Collection Application Form" from the Graduate School of Buriram Rajabhat University and distributed survey questionnaires to 8 undergraduate colleges and universities in Hebei Province to collect data. In order to investigate the current situation of personnel management by educational institution administrators in undergraduate colleges and universities in Hebei Province, the researcher carefully examined the survey questionnaire and distributed an online questionnaire to 375 teachers from 8 undergraduate colleges and universities in Hebei Province through "Questionnaire Star". The researcher informed them of the purpose, methods, precautions for filling out the questionnaire, and determined the time for collecting the questionnaire online. If the questionnaire is not returned within the specified time, the researcher will personally follow up to ensure that all questionnaires are ultimately returned.

4. Data Analysis

By using content analysis methods to analyze the collected information and data, the main analysis items are as follows:

- 4.1 Perform percentage statistics on the basic information of the sample group to describe the distribution of each category in the sample, in order to understand the features and components of the sample. This study calculated the percentages of the following variables: work experience and educational backgrounds.
- 4.2 Based on the Likert five-point scale, this study analyzed the current situation of personnel management by educational institution administrators in undergraduate colleges and universities in Hebei Province by calculating the mean () and standard deviation. The explanation for the mean is as follows (Booncham Srisaad, 2011: 163).



Mean Range	Interpretation
4.51-5.00	The highest
3.51-4.50	High
2.51-3.50	Moderate
1.51-2.50	Low
1.00-1.50	The lowest

4.3 The research compared the views of teachers with different work experiences and educational backgrounds on the current situation of personnel management by university administrators in Hebei Province, and analyzed them using t-test. It also collected and organized other viewpoints and suggestions on the personnel management by university administrators in Hebei Province, using frequency distribution and percentage for analysis.

Research Results

According to the research objectives, the research results are as follows:

This survey was conducted through the "Questionnaire Star" online form in undergraduate colleges and universities in Hebei Province, China. The questionnaire structure is divided into three parts: personal information of respondents, personnel management by educational institution administrators, and suggestions from respondents. The background information in the questionnaire includes educational backgrounds and work experience. The personnel management section is based on literature review and consists of a questionnaire of 50 items, using the Likert five-point scale. In this scale, 1 represents the least satisfied and 5 represents the most satisfied.

1. Respondents' Basic Statistical Data



Table 1

The quantity and percentage of general data of respondents

Respondents	Number	Percentage
1. Work Experience		
1.1 Less than 5 years	158	42.1
1.2 5 years or more	217	57.9
Total	375	100
2. Education Level		
2.1 Bachelor's degree	133	35.5
2.2 Higher than bachelor's degree	242	64.5
Total	375	100

According to Table 1, it was found that the sample group of respondents who were teachers numbered 375 people. When divided according to work experience of more than 5 years, the largest group was 217 people, accounting for 57.9%, and less than 5 years was 158 people, accounting for 42.1%, respectively. When divided according to educational level, it was found that there were the most people with higher than a Bachelor's degree, numbering 242 people, accounting for 64.5%, and Bachelor's degree holders numbered 133 people, accounting for 35.5%, respectively.

2. Based on the overall and individual opinions of teachers, a study was conducted on the mean and standard deviation of the current situation of personnel management by educational institution administrators in undergraduate colleges and universities in Hebei Province, the People's Republic of China.



Table 2

Elements of personnel management		S.D.	Level	Rank
1. Recruitment management	4.07	0.24	High	1
2. Training management	3.74	0.22	High	3
3. Assessment management	3.73	0.22	High	4
4. Promotion management	3.75	0.21	High	2
5. Salary management	3.55	0.23	High	5
Total	3.77	0.12	High	١

According to Table 2, it was found that the overall level of personnel management in undergraduate colleges and universities is very high. ($\bar{x} = 3.77$, S.D = 0.12) From various aspects, the average level of recruitment management was the highest ($\bar{x} = 4.07$, S.D = 0.24), followed by promotion management ($\bar{x} = 3.75$, S.D = 0.21), while the average value of salary management was the lowest ($\bar{x} = 3.55$, S.D = 0.23).

3. A comparison of the current situation of personnel management by educational institution administrators in undergraduate colleges and universities in Hebei Province, People's Republic of China, based on teachers' opinions, categorized by work experience, both overall and in individual aspects.

Table 3

The current situation of personnel management by educational		work experience					
		than 5	5 years or				
institution administrators	years more		ľ				
	\overline{x}	S.D.	\overline{x}	S.D.			
1. Recruitment management	4.06	0.23	4.07	0.24	-0.48		
2. Training management	3.75	0.23	3.74	0.21	0.42		
3. Assessment management	3.73	0.23	3.75	0.22	-0.72		
4. Promotion management	3.74	0.22	3.75	0.20	-0.31		
5. Salary management	3.55	0.22	3.56	0.24	-0.21		
Total	3.76	0.12	3.77	0.12	-0.51		



According to Table 3, teachers' comparative opinions on the current situation of personnel management by educational institution administrators were classified by work experience. There was no difference between overall and specific aspects.

4. A comparison of the current situation of personnel management by educational institution administrators in undergraduate colleges and universities in Hebei Province, People's Republic of China, based on teachers' opinions, categorized by educational backgrounds, both overall and in individual aspects.

Table 4

	Edu	Educational backgrounds						
The current situation of personnel management by educational institution administrators	Bache		Higher than Bachelor's Degree		t			
	\overline{x}	S.D.	\overline{x}	S.D.				
1. Recruitment management	4.06	0.23	4.07	0.24	-0.48			
2. Training management	3.75	0.23	3.74	0.21	0.42			
3. Assessment management	3.73	0.23	3.75	0.22	-0.72			
4. Promotion management	3.74	0.22	3.75	0.20	-0.31			
5. Salary management	3.55	0.22	3.56	0.24	-0.21			
Total	3.76	0.12	3.77	0.12	-0.51			

According to Table 4, teachers' comparative opinions on the current situation of personnel management by educational institution administrators were classified by educational backgrounds. There was no difference between overall and specific aspects.

Discussion

Based on the research results, the following points were discussed:

1. School administrators generally have a high level of personnel management, as talent cultivation has become increasingly important in today's rapidly developing economy and society. Faced with the new development environment, human resource management in universities is facing



new opportunities and challenges. Each major school is based on the crisis, taking timely and scientific measures to respond to various situations, seizing opportunities, and taking the initiative. In university teaching, human resource management is an important task, and the scientific and rational management methods will directly affect the school's position in the competition for university rankings. Therefore, effective reform and innovation of human resource management in Chinese universities are required to enhance the core capabilities of the talent pool and an important way to cope with the development of the knowledge economy in society. (Liu & Xu, 2023: 110-114)

This is consistent with Yan's (2022:10) research. Her research mentioned that personnel management is extremely important in educational management. The 21st century is the era of knowledge economy. With the rapid advancement of science and technology and the acceleration of economic globalization, human resources have become a key competitive capital. Therefore, in this context, personnel management is particularly important in the field of education. Higher education institutions are not only important places for cultivating high-level talents, but also core bases for national and regional knowledge innovation. To ensure the high quality and efficiency of education, effective management of its internal personnel is necessary. Personnel management can promote the potential of educators, improve the quality of their teaching and research, and contribute to the development of the knowledge economy.

Therefore, it has found that teachers' opinions on the personnel management of school administrators are generally at a high level.

2. According to the teachers' opinions, there is no significant difference in the overall or various aspects of the current situation of personnel management by educational institution administrators, classified by work experience and educational backgrounds. The reason is the result of the combined effects of the popularization of modern human resource management concepts, the particularity of human resource management models in universities, and the limitations of teaching models and faculty. These factors encourage managers to adopt similar management strategies and methods in practice, thereby reducing significant differences in management effectiveness caused by individual background differences. (Liu, 2022: 126-127) Its relevant content is consistent with the view put forward by Qiao (2020: 48-49) in the "Informatization Construction of Human Resource Management in Colleges and Universities under the Internet plus Environment", which points out that the informatization construction of human resource management in colleges and universities is



particularly important, which will directly affect the overall management quality of colleges and universities. The construction of human resource informatization within each university includes the establishment of systems, talent cultivation, recruitment and assessment, etc., to ensure the quality of human resource management in universities. The results show that in the context of Internet plus, with the help of advanced information technology, human resource management in colleges and universities will achieve modernization to meet the new needs of social development. In the context of Internet plus, human resource management will be improved in quality. Colleges and universities must improve, attach importance to and strengthen the modernization drive, which will greatly promote the rapid development of various management work in colleges and universities.

Conclusion

1. The Research has found that in undergraduate colleges and universities in Hebei Province, China, the overall the current situation of personnel management by educational institution administrator was at a relatively high level. When analyzing various personnel management fields in detail, all fields were at a relatively high level. Among them, recruitment management had the highest average value, followed by promotion management, while salary management had the lowest average value.

There was no significant difference in the views of different teachers on the overall and various aspects of personnel management in universities, based on their educational backgrounds and work experience.

Suggestions

Based on the results of this study, the researchers provide application suggestions for university administrators in personnel management by identifying the lowest average term in all aspects of the research.

1. In terms of recruitment management, university administrators should strengthen communication with various departments to ensure a deep understanding of the specific responsibilities and required skills of each position, in response to the analysis of personnel needs by administrative personnel based on university positions. This will help to more accurately assess personnel needs.



- 2. In terms of training management, university administrators can develop diverse training methods, such as online courses, seminars, workshops, and on-site training, to cater to employees with different learning styles and work schedules, in response to the development of personnel training plans for administrative personnel.
- 3. In terms of assessment management, university administrators can increase employee participation and improve the transparency and acceptance of the evaluation process, in order to ensure that university administrators have effective evaluation standards and implement them fairly in practice. Provide regular training and guidance to help administrators and employees understand evaluation standards and processes, ensuring the fairness and effectiveness of evaluation activities.
- 4. In terms of promotion management, for "administrative management personnel commending or rewarding outstanding or successful employees, which is an important means to boost employee morale and motivate the team", university administrators should be transparent and fair in the distribution process of rewards, ensuring that all employees are clear about the standards and procedures of rewards, thereby enhancing the credibility of rewards.
- 5. In terms of salary management, university administrators can adopt advanced salary management systems to continuously supervise and inspect the implementation of rules and regulations on salary payment for university employees. Through data analysis and anomaly detection techniques, abnormal situations in salary payment can be detected and corrected in a timely manner.

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The Current State, Ideal State, and the Need of Professional Learning Community for Enhancing Learning Management Capabilities for Teachers at Guangxi Police College

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Abstract

This research at Guangxi Police College's teacheremploys both quantitative and qualitative methods to evaluate personnel competency enhancement. The study aims to analyze the components of competency, current and ideal states, and enhancement needs. Data was collected through expert interviews, and questionnaires with sample population. Tools included semi-structured interviews and rating scale questionnaires. Analysis used descriptive statistics (mean, standard deviation) and inferential statistics (PNI Modified). Results identified six key components: 1) Shared vision and values 2) Shared leadership 3) Teamwork 4) Dialogue and reflection of common ideas 5) Professional learning and development and 6) Structure to support the learning community. The current state is moderate (mean=3.40, S.D.=0.96); the ideal state is moderate (mean=3.49, S.D.=1.01). Needs analysis indicated Shared leadership as most needed (PNI_{modified}=0.04), with Structure to support the learning community least needed (PNI_{modified}=0.02).

Keyword: Professional Learning Community, Enhancing Learning Management Capabilities, need assessment



Introduction

The 21st century is an era of globalization with rapid development in science and technology. Promoting the Learning Management Capabilities of teachers is an important factor in the development and innovation of education. Driving Higher Education Reform and Innovation of Teacher Professional Lifelong are an important factor that affects the learning ability of learners.

The National Teacher Training Plan Implementation Manual of the People's Republic of China proposes to create a workshop and training atmosphere for teachers. Create a professional training community for teachers, and create a regional learning organization for collaborative learning. Realize the development of offline education and online training, and build a sustainable, standardized, and stable core teacher training system. (Ministry of Education of the People's Republic of China, 2021, p.1).

Professional Teaching Standards for Higher Vocational Schools (Trial) clearly states that PLC can promote a sense of cooperation, unity, and professional dialogue to build mutual understanding and support, as well as improve the quality of teachers' teaching. Therefore, Refine concepts and be prepared to learn new things to adapt by building new participatory relationships between groups of teachers. Teachers can take the initiative participate in various practical processes. Interdisciplinary communication between teachers contributes to overcoming the obstacles caused by the academic organizational culture, and is more conducive to the establishment and operation of the organization of the interdisciplinary team. Therefore, PLC are an important communication platform for teachers. Can promote the exchange of ideas and promote academic innovation. (Ministry of Education of the People's Republic of China, 2019, p.1).

The draft National Medium and Long-Term Education Reform and Development Plan states that PLC is an important way for the professional development of teachers. In sharing and discussing the teaching problems, jointly realize effective ways to solve them, and ultimately focus on the continuous learning of students. Continuously improve students' learning outcomes and promote their own learning. (State Council, 2020, p.1)

Since the upgrade and transformation of Guangxi Police College, the rapid development of various businesses of the school has proposed higher requirements for education and teaching,



but some teaching management personnel do not have a full understanding of the pedagogical law of modern higher education, the teaching results cannot be Reflecting on the training goals of the ability to apply teachers, lack of awareness in learning. Professional cooperative knowledge and teaching quality also need to be improved.

Therefore, the researcher chose to conduct a research and analysis to the Current State, Ideal State, and the Need of Professional Learning Community for Enhancing Learning Management Capabilities for Teachers at Guangxi Police College, and provide an important basis for Guangxi Police College to improve the quality of teachers and improve the quality of teaching. This is of great practical importance for promoting education reform.

Objectives

This research consisted of two objectives:

- 1. To investigate the key components for enhancing learning management capabilities for teachers at Guangxi Police College.
- To examine the current state, ideal state, and the needs of the Professional Learning Community for Enhancing Learning Management Capabilities for Teachers at Guangxi Police College.

Research Methodology

The research methodology is divided into two phases:

- **3.1 Phases 1:** Investigating the key components for enhancing learning management capabilities for teachers at Guangxi Police College
 - 3.1.1 Target group consists of 5 qualified people obtained from specific selection.
- 3.1.2 Research Tools: The researcher used semi-structured interviews as a research tool in this area.
 - 3.1.3 Data collection: The researcher collected data by the following methods:
- 3.1.3.1 Literative Review: We conducted an in-depth literature search on the composition of educators. Scholars and Researchers on the Use of Professional Learning Communities to Promote Learning Management Abilities.
 - 3.1.3.2 Semi-structured interviews: The researcher conducted interviews with



5 experts to gather more insights and additional information about the professional learning community component of the learning management ability of Guangxi Police College lecturers.

After the above data is collected, the researcher used the data to adapt the elements synthesized from the review to be more comprehensive and appropriate.

- 3.1.4 Data analysis: The researcher analyzed the data by content analysis.
- **3.2 Phases 2:** Examining the current state, ideal state, and the needs of the Professional Learning Community for Enhancing Learning Management Capabilities for Teachers at Guangxi Police College.
- 3.2.1 Population and sample: The population was 260 professors from Guangxi Police College, and the sample was determined using the Krejcie & Morgan table, and a sample of 155 people was obtained using a simple random method.
- 3.2.2 Research Tools: The data collection tool is a questionnaire about the needs needed to use professional learning communities. In order to promote the learning management ability of teachers in Guangxi Police College, 5 experts were invited to check the accuracy of the content by searching for The Index of Item-Objective Congruence (IOC) for both the current state questionnaire and the ideal state questionnaire was between 0.60 and 100. While the reliability of the current state questionnaire was calculated using Cronbach's Alpha coefficient, yielding a value of 0.93, the Corrected ItemTotal Correlation value was between 0.31 and 0.73, and the reliability value of the ideal state questionnaire was calculated using Cronbach's Alpha coefficient, yielding a value of 0.96, and the Corrected ItemTotal Correlation value was between 0.48 and 0.83.
 - 3.2.3 Data analysis was as follows:
- 3.2.3.1 Data analysis using basic statistics such as percentage, mean, deviation, and standard PNI modified Qualitative data uses content analysis.
- 3.2.3.2 Priority Needs Index (PNI) analysis Modified and sort the values in order from highest to lowest. The calculation formula is $PNI_{Modified} = (I-D)/D$.

PNI stands for Priority Needs Index.

I (Important) stands for the average value of the state that it should be.

D (Degree of Success) stands for the average of the current conditions.



Results

According to research objectives, the research of the research is divided into two parts. as follows:

- 4.1 Components of the PLC for Enhancing Learning Management Capabilities for teachers at Guangxi Police College. The researcher conducted a literature review by studying documents, textbooks, and related research and synthesizing the elements, and interviewing experts. Subsequently, the researcher obtained the synthesized components and elements that will be utilized in the research as: 1) having a shared vision and values, 2) shared leadership, 3) collective creativity, 4) reflective professional inquiry dialogue, 5) professional learning and development, and 6) learning community support structures.
- 4.2 The needs of the PLC for Enhancing Learning Management Capabilities for Teachers at Guangxi Police College.
- 4.2.1 The researchers conducted a questionnaire survey among 155 teachers from Guangxi Police College, and the data results were shown in Table 1:

Table 1

Components of Enhancing the Competency

	Current states(D)				Ideal stat	PNI _{Modified}	Order	
Components	\overline{x}	S.D.	level	\overline{x}	S.D.	level	(I-D)/D	of need
- Shared vision and values	3.39	1.12	moderate	3.49	1.19	moderate	0.03	2
- Shared leadership	3.37	1.15	moderate	3.49	1.19	moderate	0.04	1
- Teamwork	3.42	1.14	moderate	3.50	1.18	high	0.03	2
- Dialogue and reflection of common ideas	3.39	1.10	moderate	3.48	1.18	moderate	0.03	2
- Professional learning and development	3.41	1.10	moderate	3.52	1.17	high	0.03	2
- Structure to support the learning community	3.40	1.10	moderate	3.48	1.13	moderate	0.02	3
Total	3.40	0.96	moderate	3.49	1.01	moderate	0.01	

From Table 1, It is found that the current state for use PLC to promote learning management skills for teachers in Guangxi Police College is overall at a moderate level (\bar{x} =3.40, SD=0.96) and when considering each factor, the average is ordered from descending, including Teamwork (\bar{x} =3.42, SD=1.14) at the highest level, and the lowest level is the factor Shared



leadership (\bar{x} =3.37, SD=1.15).

As for the ideal state for use PLC to promote learning management Capabilities for teachers in Guangxi Police College, overall it was at a high level (\bar{x} =3.49, SD=1.01) and when considering each component, Sort average descending, including Professional learning and development (\bar{x} =3.52, SD=1.17) at the highest level, and the lowest level is the factor Dialogue and reflection of common ideas (\bar{x} =3.48, SD=1.18) and Structure to support the learning community (\bar{x} =3.48, SD=1.13).

2.2 Table 2-Table 7 were the data analysis results of specific indicators for each competency.

Table 2

Components of Shared vision and values

Items	D	level	I	level	PNI _{Modified} (I-D)/D	Order of need
- Teachers have a vision and goals that align with the development of the college.	3.37	moderate	3.42	moderate	0.01	3
- Teachers share the recognition that learning management skills are essential for student development.	3.39	moderate	3.50	high	0.03	2
- Teachers are willing to achieve common goals.	3.39	moderate	3.48	moderate	0.03	2
- Teachers adhere to the principle of teamwork to achieve their goals.	3.43	moderate	3.52	high	0.03	2
- Teachers are given equal opportunities by the college to develop themselves.	3.35	moderate	3.51	high	0.05	1

From Table 2, when considering each element, it was found that the order of essential requirements for Shared vision and values competency was arranged in order of the necessary requirements from the greatest to least. The needed enhancing the most was Teachers are given equal opportunities by the college to develop themselves. ($PNI_{modified}=0.05$), while the Teachers have a vision and goals that align with the development of the college was the least ($PNI_{modified}=0.01$).



Table 3

Components of Shared leadership

Items	D	level	I	level	PNI _{Modified} (I-D)/D	Order of need
- The PLC has a team of advisors to help Teachers of the community work towards a common goal of self-development.	3.37	moderate	3.55	high	0.05	2
- Leaders and Teachers who participate in the PLC plan together to develop the learning management potential of the Teachers.	3.27	moderate	3.40	moderate	0.04	3
- Leaders encourage Teachers of the community to Participate and take responsibility for leadership, Until they become co- leaders to drive the operation of the community.	3.35	moderate	3.39	moderate	0.01	4
- Teachers of the PLC are respectful of differences, trust each other. Share operational roles and responsibilities.	3.47	moderate	3.48	moderate	0.01	4
- Teachers of the PLC support each other's inspiration. An atmosphere has been created that encourages Teachers to express themselves freely.	3.37	moderate	3.63	high	0.08	1

From Table 3, when considering each element, it was found that the order of essential requirements for Shared leadership competency was arranged in order of the necessary requirements from the greatest to least. The needed enhancing the most was Teachers of the PLC support each other's inspiration. An atmosphere has been created that encourages Teachers to express themselves freely (PNI_{modified}=0.08), while the Leaders encourage Teachers of the community to Participate and take responsibility for leadership, until they become co-leaders to drive the operation of the community, and Teachers of the PLC are respectful of differences, trust each other. Share operational roles and responsibilities was the least (PNI_{modified}=0.01).

Table 4

Components of Teamwork

Items	D	level	I	level	PNI _{Modified} (I-D)/D	Order of need
- Teachers who participate in the PLC work together to coordinate in		moder		moder		
their operations to achieve the common goal of developing the	3.40		3.44		0.01	3
teaching and learning management ability of the Teachers.		ate		ate		



Items	D	level	I	level	PNI _{Modified}	Order of need
- Teachers who participate in the PLC actively participate in the exchange of learning about teaching and learning management skills.	3.28	moder ate	3.54	high	0.08	1
- Teachers who participate in the PLC encourage to use their creativity. In order to create ideas, to solutions new problems or creative innovation. In learning management to develop learners.	3.46	moder	3.50	high	0.01	3
- Teachers who join PLC encourage continuous teaching and learning collaboration to experiment with new techniques.	3.43	moder ate	3.52	high	0.03	2
- Teachers who join the PLC create a happy atmosphere. Emphasis on helping and supporting each other.	3.50	high	3.52	high	0.01	3

From Table 4, when considering each element, it was found that the order of essential requirements for Teamwork competency was arranged in order of the necessary requirements from the greatest to least. The needed enhancing the most was Teachers who participate in the PLC actively participate in the exchange of learning about teaching and learning management skills (PNI_{modified}=0.08), The second is Teachers who join PLC encourage continuous teaching and learning collaboration to experiment with new techniques (PNI_{modified}=0.03), other elements ranked third, all the order of the necessary requirements was the least (PNI_{modified}=0.01).

Table 5

Components of Dialogue and reflection of common ideas

					PNI _{Modified}	Order	
Items	D	level	I	level	(I-D)/D	of	
						need	
- Teachers who join the PLC engage in professional conversations							
and evaluate their performance together on their ability to manage	3.37	moderate	3.44	moderate	0.02	2	
learning.							
- Teachers who join the PLC are willing to share their challenges							
and success stories, emphasizing the process of dialogue and	3.42	moderate	3.48	moderate	0.02	2	
reflecting on each other's ideas.							
- Teachers who join the PLC share their doubts and questions	2.25	•	2.51	high	0.05		
candidly under an atmosphere of independence.	3.35	moderate	3.51			1	
- Teachers who join the PLC have talks to reflect on their	2.41	•	2.40		0.02		
performance and provide constructive feedback to other Teachers.	3.41	3.41	moderate	3.48	moderate	0.02	2



From Table 5, when considering each element, it was found that the order of essential requirements for Dialogue and reflection of common ideas competency was arranged in order of the necessary requirements from the greatest to least. The Capabilities that needed enhancing the most was Teachers who join the PLC share their doubts and questions candidly under an atmosphere of independence (PNI_{modified}=0.05), while the Skill of Teachers who join the PLC engage in professional conversations and evaluate their performance together on their ability to manage learning, Teachers who join the PLC are willing to share their challenges and success stories, emphasizing the process of dialogue and reflecting on each other's ideas and Teachers who join the PLC have talks to reflect on their performance and provide constructive feedback to other Teachers were both needed as the second (PNI_{modified}=0.02).

Table 6

Components of Professional learning and development

Items	D	level	I	level	PNI _{Modified} (I-D)/D	Order of
			1			need
- Teachers who join the PLC share the knowledge, skills and						
experiences necessary for professional development to other	3.36	moderate	3.49	moderate	0.04	2
Teachers.						
- Teachers who join the PLC have collaborative learning,	2.42	moderate	3.51	high	0.02	4
by interacting and working together.	3.43					
- Teachers who participate in the PLC support each other to	2.41	moderate	3.55	high	0.04	
develop the learning potential of learners.	3.41					2
- Teachers who join the PLC encourage the study of new	2.20	moderate	3.57	high	0.06	
learning methods and tools.	3.38					1
- Teachers who join the PLC pass on effective methods to other						
Teachers to use to develop and improve learning	3.46	moderate	3.47	moderate	0.01	5
management for learners more effectively.						

From Table 6, when considering each element, it was found that the order of essential requirements for Professional learning and development competency was arranged in order of the necessary requirements from the greatest to least. The needed enhancing the most was Teachers who join the PLC encourage the study of new learning methods and tools ($PNI_{modified} = 0.06$), while the Teachers who join the PLC pass on effective methods to other Teachers to use to develop and improve learning management for learners more effectively was the least ($PNI_{modified} = 0.01$).



Table 7

Components of Structure to support the learning community

Items	D	level	I	level	PNI _{Modified} (I-D)/D	Order of need
- PLC have a supporting and facilitating the community of professional learning's structure.	3.42	moderate	3.45	moderate	0.01	5
- PLC is operated under the sincere respect of all Teachers of the community.	3.46	moderate	3.52	high	0.02	3
- PLC adheres to development as the norm in the operation of the community.	3.43	moderate	3.50	high	0.02	3
- PLC is collaborative in a friendly atmosphere. There is empathy and listening to opinions, respecting differences.	3.26	moderate	3.52	high	0.08	1
- PLC creates a sense of trust and openness to each other, then chain of command or informal work.	3.39	moderate	3.43	moderate	0.01	5
- PLC has management of supporting factors to facilitate the						
operation, such as time, agenda, location, and knowledge and abilities of Teachers, etc.	3.43	moderate	3.54	high	0.03	2

From Table 7, when considering each element, it was found that the order of essential requirements for Structure to support the learning community competency was arranged in order of the necessary requirements from the greatest to least. The needed enhancing the most was PLC is collaborative in a friendly atmosphere. There is empathy and listening to opinions, respecting differences (PNI_{modified}=0.08), while the PLC have a supporting and facilitating the community of professional learning's structure and PLC creates a sense of trust and openness to each other, then chain of command or informal work was the least (PNI_{modified}=0.01).

Discussion and Conclusion

According to data analytics, Teacher of Guangxi Police College have improved needs in terms of Shared vision and values, Shared leadership, Teamwork, Dialogue and reflection of common ideas, Professional learning and development and Structure to support the learning community, Based on the results of the research, the results can be discussed as follows:



1. The researchers identified six components of using professional learning communities to improve the learning and management ability of teachers in Guangxi Police College: Shared vision and values, Shared leadership, Teamwork, Dialogue and reflection of common ideas, Professional learning and development and Structure to support the learning community. The results of this study highlight the importance of using professional learning communities to improve learning management capabilities. Shared vision and values is the foundation of a professional learning community, it defines the goals and beliefs that teachers share to pursue. Shared leadership meaning that the leadership role in the community is not fixed, but is shared by the community members. Teamwork is an integral part of the professional learning community, emphasizing collaboration and mutual assistance among teachers. Dialogue and reflection of common ideas is an important way to facilitate communication and thinking among members of the professional learning community. Professional learning and development is the core goal of the professional learning community, which emphasizes the continuous improvement of members' professional knowledge and skills. Structure to support the learning community can ensure the orderly conduct of community activities and the effective participation of members. At the same time, it fosters communication and collaboration within the community, improving overall effectiveness. PLC provides a platform for teachers, scholars and practitioners from different backgrounds and fields of education to exchange and collaborate, enabling them to share professional knowledge, teaching experience and teaching resources, and this knowledge sharing helps participants to understand the latest educational concepts, methods and tools, thereby enhancing their learning management skills. The findings of this study align with the perspectives of Wang (2018, pp. 64-69), who pointed out that PLC encourages teachers to learn and discuss around shared vision and values, form a common learning motivation and direction, solve problems and face challenges together, and engage in dialogue and reflection through teamwork, so that teachers can learn from each other's learning methods and experiences, continuously optimize their learning strategies, and jointly improve learning management skills. The findings of this study also align with the perspectives of Huang (2020, pp. 82-86), who pointed out that PLC provides a supportive environment for teachers, so that they can receive timely help and encouragement in the face of difficulties and challenges, which helps to enhance members' selfconfidence and motivation to learn, and make them more willing to try new learning management

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strategies. The findings of this study also align with the perspectives of Ding (2019, pp. 57-62), who pointed out that PLC encourages teachers from different educational backgrounds to actively explore new educational concepts and technologies and apply them to actual teaching, through practice and innovation, teachers can continuously discover and improve learning management methods, improve teaching quality and students' learning experience, and establish an effective evaluation mechanism to conduct regular evaluation of the teaching process and learning effectiveness, and provide feedback and suggestions to promote continuous improvement and upgrading. In addition, the findings of this study also align with the perspectives of Hu (2017, pp. 45-48), which validates that the use of PLC can significantly improve learning management capabilities, as it not only provides a platform for sharing knowledge and resources, but also fosters collaboration and communication among teachers, provides opportunities for continuous professional development, and encourages reflective practice and the adoption of innovative solutions. All these help teachers to better adapt to the changing educational environment and improve the effectiveness of learning management and the quality of teaching.

2. The research of the needs of the components for enhancing the learning and management ability for teachers in Guangxi Police College discovered that Shared leadership was the most critical component that needed to be improved. PLC emphasizes cooperation and sharing among teachers, and Shared leadership can promote the formation of this collaborative atmosphere, teachers can more effectively communicate teaching ideas, methods and resources, so as to jointly improve the quality of teaching. In the current educational environment, PLC encourages teachers to become lifelong learners, and Shared leadership is an important way to enhance teachers' leadership potential, by participating in leadership activities, teachers can exercise their organizational skills, communication skills and decision-making skills, and lay the foundation for future career development. The findings of this study align with the perspectives of Ou (2016, pp. 71-73), who pointed out that the core objective of PLC is to promote the continuous professional development of teachers, and that Shared leadership is the key to achieving this goal, and that Shared leadership can work together to develop professional development plans, share learning resources, support each other, and progress together. In the current rapidly changing educational environment, Shared leadership helps PLC better adapt to these changes, and through Shared leadership, PLC can be more flexible in adapting teaching strategies, curriculum content,



and teaching methods to respond to changes in education policies, student needs, and the social environment. The findings of this study also align with the perspectives of Pu (2021, pp. 7-9), who pointed out that the essence of PLC lies in deep collaboration and resource sharing among teachers. Shared leadership stimulates teachers to collaborate and make them more active in sharing teaching experiences, resources, and innovative approaches. Through Shared leadership, teachers can work more closely together to solve teaching problems and improve the quality of teaching, and in PLC, Shared leadership means a more democratic, transparent and inclusive decision-making process. Through brainstorming and decision-making, teachers are able to gain a more comprehensive understanding of the strengths and weaknesses of various teaching options, so as to make decisions that are more in line with the teaching reality and the needs of students. In addition, Shared leadership strengthens the execution of decisions, as teachers are more likely to support decisions they are involved in. The findings of this study also align with the perspectives of Hargreaves (2014, p. 11), who argues that Shared leadership not only helps to empower existing leaders, but also develops more teachers with leadership potential. In PLC, teachers have the opportunity to take turns in leadership roles and practice their leadership skills. This experience not only contributes to the personal growth of teachers, but also reserves more leadership talent for PLC, one of the goals of which is to promote continuous professional development of teachers. Shared leadership stimulates teachers' enthusiasm for learning and enables them to be more actively involved in professional development activities. Through Shared leadership, teachers can work together to develop professional development plans, share learning resources, support each other, and progress together.

Suggestion

Based on the research findings, here are some recommendations:

1. To this end, the authors studied the conditions and in strengthening the professional learning community for the promotion of learning management competencies for teachers in Guangxi Police College, and collected data to summarize the six learning management competency components: 1) Shared vision and values 2) Shared leadership 3) Teamwork 4) Dialogue and reflection of common ideas 5) Professional learning and development and 6) Structure to support the learning community. These data had reference value for enhancing



the competencies of teachers in the i other universities in Guangxi. Although the circumstances and roles of colleges may be different, the workload duties of teachers are similar. Therefore, the results of this study can be applied to the training of teacher competency development according to real situations.

2. For future research, this study suggested developing a PLC model targeting the competency enhancement needs of teachers from the Guangxi Police College. The competency enhancement model should be developed through interviews with Best Practice universities that have successful experience in enhancing the competencies of teachers, as well as expert seminars. A competency enhancement training manual should also be written. The training manual can provide reference for other Police College that need to improve the Learning Management Capabilities.

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The Private Kindergarten Principals' Leadership in New Era in Shaanxi Province, People's Republic of China: A Synthesis Study

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Abstract

This paper aimed to synthesize the issues in private kindergarten principals' leadership in Shaanxi Province, People's Republic of China. The target group used in the study consists of 10 previous studies, theories and related documents. The research instrument was the frequency distribution comprehensive table. This study employed content analysis to synthesize findings from academic databases and explored the significance, scope, and importance of enhancing private kindergarten principals' leadership in Shaanxi Province, People's Republic of China. The frequency distribution comprehensive table for synthesis was only selected the components for private kindergarten principals' leadership with a frequency of more than more than 50%. The research results showed that there are four relevant leaderships that private kindergarten principals should enhance: 1) Transformed leadership; 2) Value leadership; 3) Human leadership; and 4) Structural leadership. These leaderships can help private kindergarten principals accurately assess their own leadership levels and provide reference standards for developing enhancing private kindergarten principals' leadership models.

Keyword: Educational leadership, Private kindergartens, Private kindergarten principals



Introduction

In a rapidly globalizing world, education equips individuals with the skills and knowledge needed to compete and innovate. Education also plays a key role in addressing inequality, both globally and within China, by empowering marginalized communities. As China's economy continues to evolve, education remains the foundation for sustained growth and development. Globally, the importance of education transcends borders, acting as a catalyst for peace, environmental sustainability, and cross-cultural understanding. The global and national focus on education reflects its unparalleled potential to shape the future of humanity.

Pre-education, or early childhood education, plays a pivotal role in shaping a child's future and laying the foundation for lifelong learning. Globally, it is widely recognized that the first years of a child's life are crucial for cognitive, emotional, and social development. In China, the importance of early childhood education has gained increasing attention, with the government implementing policies to expand access to kindergartens and improve quality. This is particularly critical as China seeks to foster a well-rounded, innovative workforce to meet the demands of the 21st century. The Chinese government has emphasized early education as part of its broader strategy to reduce educational inequality, especially in rural areas (Zhang & Liu, 2017, pp. 111-130). Both in China and globally, pre-education is recognized as the bedrock of not only academic success but also emotional well-being and social integration. Investing in pre-education ensures that children are better prepared for future challenges and opportunities, contributing to stronger, more equitable societies.

Kindergarten principals play a crucial role in shaping the quality of early childhood education, as their leadership directly impacts the development of both teachers and students. They are responsible for creating a supportive and nurturing environment that fosters learning and growth during the most formative years of a child's life (Osler & Flack, 2008, pp. 55-80). Effective principals lead with a vision that emphasizes the importance of social, emotional, and academic development, ensuring that the curriculum and teaching methods meet the needs of young learners. In China and around the world, kindergarten principals also serve as key decision-makers in implementing educational reforms and adapting to policy changes. Their leadership in managing resources, overseeing teacher training, and engaging with families contributes significantly to the overall success of the kindergarten (Chan, 2013, pp. 30-39).



Kindergarten principals face numerous challenges in their administration, balancing the demands of leadership, education quality, and resource management. One of the most significant hurdles is ensuring that the curriculum meets both national standards and the developmental needs of young children, which requires constant adaptation and innovation. Additionally, principals must effectively manage limited resources, from budgets to staffing, while maintaining a high standard of early childhood education. In China, rapid policy changes and educational reforms add extra pressure, as principals must stay up-to-date and ensure their kindergartens comply with new regulations (Hong et al., 2022, pp. 123-148). Another challenge is addressing teacher development, as principals need to provide ongoing professional training while preventing burnout among staff. Engaging parents and fostering strong home-school partnerships is another administrative responsibility that requires time and effort, yet is crucial for student success. Moreover, principals must navigate issues of equity, ensuring that children from diverse backgrounds receive equal opportunities for growth and learning (Day et al., 2011, pp. 167-181). The increasing expectation for kindergartens to integrate technology into early education further complicates the administrative landscape. Ultimately, the role of a kindergarten principal requires multifaceted leadership, making it both challenging and vital to the success of early childhood education.

Kindergarten principals in China have seen their roles expand from administrative managers to autonomous leaders. Initially, principals were primarily responsible for day-to-day operations and implementing government policies. However, with the increasing complexity of preschool management and the rise of private institutions, the principal's role has become more dynamic. Principals now hold significant responsibility in decision-making and must navigate a more complex system of governance, which may include working under a board of directors. This shift requires principals to engage in leadership beyond mere administration, fostering an environment that promotes teacher empowerment and professional collaboration.

In recent years, the focus of curriculum and teaching in kindergartens has also transformed, moving from teacher-centered methods to more child-centered, dynamic approaches. Educational reforms emphasize learning through play and integrating educational objectives into everyday activities. This shift requires principals to take a more active role in curriculum development, moving beyond merely implementing preset curricula to guiding teachers in creating



flexible, adaptive learning experiences (Kang, 2020, pp. 387-415). The success of this transformation depends on the principal's ability to foster creativity and collaboration among teachers, ensuring that the curriculum aligns with the needs of children.

The role of kindergarten principals has further evolved from that of a mere manager to a visionary leader. In response to global educational changes, principals are now expected to guide the strategic direction of their institutions. Rather than focusing on daily operations, they must engage in long-term planning, value-based leadership, and cultivating a positive organizational culture (Laker & Pereira, 2024). Principals are increasingly called upon to inspire their staff, promote innovation, and adapt their strategies to the unique circumstances of their schools. This shift from management to leadership is essential for navigating the complexities of modern preschool education.

Lastly, the transformation of the principal's role into an expert in early childhood education is vital for maintaining high standards of teaching and learning. Principals must move beyond administrative duties and engage in professional development to become experts in both child care and curriculum design (Hansen, 2023, pp. 49-72). This expertise enables them to guide teachers more effectively and create an environment where professional growth thrives. As kindergartens move towards more democratic, collaborative forms of leadership, principals must embrace their role as educators and leaders, working closely with teachers to drive continuous improvement and innovation in early childhood education.

Based on all the above discussions, preschool education is crucial and as the administrators of preschool education, the demand for kindergarten principals is high and they need to have excellent leadership skills to face the changing situation, so the research on the leadership of kindergarten principals is quite valuable. However, in China, leadership research on presidents and deans of primary and secondary schools and universities is relatively common, and there is relatively little focus on leadership at the preschool level, so this study can also fill the gap.

This research focuses on the current situation of leadership of kindergarten principals in Shaanxi Province, aiming at proposing scientific and reasonable optimization strategies to enhance the leadership of kindergarten principals, so as to promote the development of early childhood education in Shaanxi Province. Improving kindergarten principals' leadership is crucial as it



directly influences the quality of early childhood education. Effective leadership fosters a positive learning environment, encourages teacher development, and ensures the efficient use of resources, all of which contribute to the overall growth of students.

Purpose of the Research

To synthesize the private kindergarten principals' leadership in Shaanxi Province, People's Republic of China.

Research Method

3.1 Data Source

This study conducted a comprehensive analysis of the theories and research findings related to the improvement of the kindergarten principals' leadership model in Shaanxi Province. The research involved reviewing the 13 relevant research papers and theories published after 2020. This included the following scholars and years: Li and Liu (2024), Zhang, Ma and Ma (2024), Pan (2023), Wang, Ren and Fu (2023), Zheng and Yang (2022), Liu (2022), Zhao and Ai (2022), Bai and Zhao (2022), Zhu (2022), Hu (2022), Wang (2021), Yuan, Zhang and Sun (2021) and Wang (2020).

3.2 Data Collection

The data was collected through the documents, academic textbooks and related research works from various higher education institution libraries and educational institutions in China and online data bases.

3.3 Data Analysis

The collected data was analyzed by using content analysis technique, and then summarized and organized those data according to the documentary analysis form. A frequency distribution table was created to consolidate the findings. This summary table organized works, theories, and related literature pertaining to the model of enhancing kindergarten principals' leadership.

Research Results

4.1 Components of Kindergarten Principals' Leadership



There are so many educational leadership ideas and models that have been discussed in 13 previous relevant research papers and theories, and each of them focuses on or includes different components. Therefore, a table was generated to illustrate which components are included in existing theories and models. (Table 1)

Table 1

Components of Kindergarten Principals' Leadership

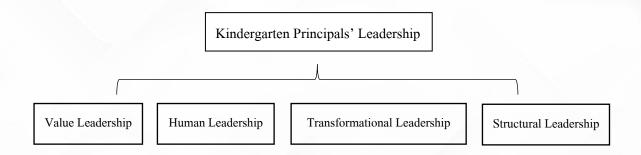
No.	Types	Value-based Leadership	Human Leadership	Transformational Leadership	Structural Leadership	Distributed Leadership	Servant Leadership	Adaptive Leadership	Educational Leadership	Relational Leadership	Enabling Leadership
1	Li & Liu (2024)	✓	√		✓		✓				
2	Zhang, Ma & Ma (2024)	✓	√	√		✓				١,	
3	Pan (2023)	√	✓		√	✓		√	✓		
4	Wang, Ren and Fu (2023)	✓		✓				/			
5	Zheng and Yang (2022)	✓		✓			✓				
6	Liu (2022)	√	✓		✓		✓				
7	Zhao and Ai (2022)		✓	✓		✓	✓	✓			
8	Bai and Zhao (2022)	✓	✓	✓	✓				=	✓	
9	Zhu (2022)	✓			✓				✓		√
10	Hu (2022)	✓		✓	✓	✓					
11	Wang (2021)			✓	✓						
12	Yuan, Zhang and Sun (2021)	✓	✓								
13	Wang (2020)	✓	✓	✓	1	✓		✓			
	Frequency	11	8	8	7	5	4	3	2	1	1



In the Table 1, through literature review, there were 10 relevant leaderships that discussed in the 13 previous relevant research papers and theories. This study selected the four observable variables with a frequency of more than 50% as components for kindergarten principals' leadership, and they are 1) value leadership, 2) human leadership, 3) transformational leadership and 4) structural leadership as shown in Figure 1 below.

Figure 1

Components of Kindergarten Principals' Leadership



The details of each component of the kindergarten principals' leadership are as follows:

- 1. Value leadership refers to a leadership approach grounded in ethical principles and core values, where leaders align their actions, decisions, and behaviors with these values to inspire and guide others. This leadership style emphasizes integrity, accountability, fairness, and transparency, fostering trust and commitment among followers. Value leaders focus on creating a shared sense of purpose, driving both individual and organizational success while promoting long-term sustainability. By consistently applying values in decision-making, they cultivate a positive culture that enhances engagement, collaboration, and social responsibility within the organization.
- 2. Human leadership is a leadership approach that focuses on understanding and addressing the emotional, social, and personal needs of individuals within a team or organization. It emphasizes empathy, relationship-building, effective communication, and the development of trust and authentic connections. By prioritizing emotional intelligence, collaboration, and the recognition of individual contributions, human leadership fosters a supportive and inclusive environment that motivates and empowers people to work toward shared goals.



- 3. Transformational leadership refer to a leadership style that focuses on inspiring and motivating followers to achieve their full potential and contribute to the organization's success in ways that exceed expectations. Transformational leaders achieve this by fostering a shared vision, cultivating trust, and encouraging innovation and personal growth among team members. This approach emphasizes emotional connection, long-term goals, and a commitment to collective progress rather than just focusing on short-term objectives or transactional exchanges.
- 4. Structural leadership focuses on organizing and managing formal systems, roles, and processes within an organization to ensure order, efficiency and goal achievement.

4.2 Metrics of Value Leadership

After identified the components of kindergarten principals' leadership, the researcher continued to explore the literature review to uncover additional details. Most scholars focused on value leadership. Table 2 concluded the 9 previous studies, theories, and related documents on the metrics of value leadership within the model of enhancing kindergarten principals' leadership.

Table 2

Metrics of Value Leadership

Types	Culture-building	Planning	Social	Providing	Moral Courage	
Scholars	Capacity	Capacity	Responsibility	Services		
Barrett (2003)	✓					
Murray (2009)	√			✓		
McCormack &		./				
Garvan (2013)		•				
Houmanfar (2018)		✓	✓			
Munro (2020)	✓					
Nakamura (2022)		✓				
Bakhshandeh (2023)	✓	✓				
Lumpkin (2023)	✓	- M		A 1		
Robinson (2024)	-\ //	✓			✓	
Frequency	5	5	1	1	1	

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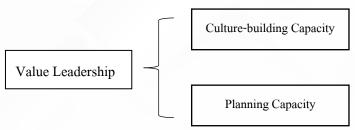
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In the Table 2, through literature review, there were 5 relevant components that discussed in the 9 previous relevant research papers and theories. This study selected the two observable variables with a frequency of more than 50% as components for value leadership, and they are 1) culture-building capacity, and 2) planning capacity as shown in Figure 2 below.

Figure 2

Metrics of Value Leadership



The details of each component of the value leadership are as follows:

- 1. Culture-building capacity refer to an ability that the principals create a kind of culture in kindergarten that can inspire and motivate people, so that the staff and children who are in it can feel their own value, release their potential and realize their value in a positive and healthy cultural atmosphere, thus enhancing the cultural character of the whole kindergarten.
- 2. Planning capacity refer to an ability that the principals firstly clarify the development vision and values of the kindergarten, so as to make clear the direction of the organization, prioritize the work, and maintain the smooth operation of the organization.

Discussion

5.1 Value Leadership

Within an organization, when a value conflict arises between members, it directly affects the cooperation between members and the organizational atmosphere, which is not only suitable for enterprises, but also applies to kindergartens. Kindergarten as a nurturing and educating institution, the organization members need to have a common value and cultural concepts. By consciously applying the core values to guide and integrate the values of the teaching staff, the principal can make all the teaching staff agree with and practice the core values of the kindergarten, so as to realize the common vision of the organization. The finding is consistent with



Li and Liu (2024), Zhang, Ma and Ma (2024), Pan (2023), Wang, Ren and Fu (2023), Zheng and Yang (2022), Liu (2022), Bai and Zhao (2022), Zhu (2022), Hu (2022), Yuan, Zhang and Sun (2021) and Wang (2020).

5.2 Human Leadership

It is crucial for the principals to demonstrate strong human leadership by fostering an atmosphere of care and trust. By doing so, they can help create a harmonious network of relationships among the staff, allowing for a more peaceful and cooperative work environment. The finding is consistent with Li and Liu (2024), Zhang, Ma and Ma (2024), Pan (2023), Liu (2022), Zhao and Ai (2022), Bai and Zhao (2022), Yuan, Zhang and Sun (2021) and Wang (2020).

5.3 Transformational Leadership

Transformational leadership is vital in kindergartens as it fosters a positive, collaborative, and innovative learning environment for both teachers and young learners. By inspiring a shared vision, kindergarten leaders can motivate teachers to adopt creative teaching methods that support holistic child development. Transformational leaders provide individualized support, mentoring educators to enhance their skills and adapt to evolving educational demands. This leadership style builds trust, boosts morale, and creates a culture of teamwork, ensuring that teachers feel valued and empowered to perform at their best. Ultimately, transformational leadership enhances the quality of education, nurturing a foundation for lifelong learning in children. The finding is consistent with Zhang, Ma and Ma (2024), Wang, Ren and Fu (2023), Zheng and Yang (2022), Zhao and Ai (2022), Bai and Zhao (2022), Hu (2022), Wang (2021), and Wang (2020).

5.4 Structural Leadership

Structural leadership involves not only the internal division of labor, rules, and management within the organization, but also communication and coordination with external stakeholders. As an educational organization, a kindergarten has a defined structure and function, and the principal, as its leader, is responsible for guiding its development and adaptation through effective management and administration. Furthermore, as kindergartens increasingly shift from closed systems to more open ones, the principal must integrate and coordinate external resources, understand stakeholder perspectives, and secure their support. Thus, the structural leadership of the principal encompasses both optimizing internal management and coordinating external resources.



The finding is consistent with Li and Liu (2024), Pan (2023), Liu (2022), Bai and Zhao (2022), Zhu (2022), Hu (2022), Wang (2021).

Conclusion

The researcher conducted a content analysis and organization based on a review of relevant literature and research findings. Data compilation was performed using a frequency distribution synthesis table and the components of kindergarten principals' leadership table was constructed. This table includes four components: 1) Value leadership; 2) Human leadership; 3) Transformational leadership; and 4) Structural leadership. The "components of kindergarten principals' leadership" table reveals which factors should be included in the model of enhancing kindergarten principals' leadership.

To sum up, this study highlights the importance of enhancing kindergarten principals' leadership, so as to provide theoretical support for the enhancement of leadership of kindergarten principals in the Shaanxi Provence, People's Republic of China.

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States and Guidelines for Student Guidance Administration of Hechi University, People's Republic of China

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Abstract

The objectives of this research are 1) to study the state of educational guidance management at Hechi University, People's Republic of China, and 2) to explore the management approaches to educational guidance at Hechi University, People's Republic of China. The sample for this research consists of 248 faculty members affiliated with Hechi University for the academic year 2024, and the target group for interviews includes 5 individuals. The research instruments comprise 1) a questionnaire and 2) a semi-structured interview. The statistical methods used for data analysis include percentage, mean, and standard deviation. The research findings indicate that the management approaches to educational guidance at Hechi University can be summarized as follows: 1) In terms of guidance teaching, the university should enhance the training system for faculty, encourage faculty participation in academic exchanges, and provide special training both domestically and internationally, while improving academic and research skills. It should support personalized learning, online learning, psychological counseling, and career planning to help students address learning and development issues and promote holistic growth. 2) Regarding career planning and employment, the university should establish collaborations with organizations and industries, understand industry trends and needs through labor market research, and enhance competitiveness in employment. Additionally, Big Data and Artificial Intelligence (AI) should be utilized for labor market analysis, creating a graduate tracking system, establishing alumni networks, and online communication platforms.



Promote interactive exchanges between graduates and current students, share professional experiences, and help current students prepare for employment, thereby enhancing their competitiveness in the job market. 3) In terms of labor quality guidance, universities should create systems for volunteer services and skills training, encouraging students to participate in social welfare activities and skill competitions, and fostering a sense of social responsibility, teamwork spirit, and practical skills. 4) Regarding student activity guidance, universities should encourage students to participate in planning activities, organizing, improving student project management, and teamwork skills by establishing planning teams led by student groups and providing training and resources.

Keyword: Student guidance management conditions, student guidance management approaches, Heze University, People's Republic of China

Introduction

In recent years, the government has placed great importance on enhancing the quality of higher education. Several policies have been established with the objective of promoting holistic student development and improving educational quality. The Modern Educational Assessment Reform Plan for the year 2020 has highlighted that education is a critical issue that requires attention to ethics, capabilities, and development in all aspects, emphasizing a comprehensive educational approach. This involves adapting teaching methods to fit individual characteristics and integrating learning with practical application. Student guidance management refers to the university's administration that provides counseling, guidance, and daily life advice to ensure that students have orderly learning and living experiences while promoting development in all areas. This includes establishing university regulations, monitoring learning progress, and observing student behavior, as well as supporting mental health, providing career planning counseling, and offering other related services.

The goal of this work is to create a safe and orderly learning environment to support students in developing good learning skills and enhancing interpersonal communication abilities. It also emphasizes self-development and achieving personal goals for students within the current education



system of vocational colleges. The management and guidance of students is a complex system that encompasses the management of students' daily behaviors and the monitoring of their progress.

And develop interpersonal communication skills, as well as place importance on self-development and achieving personal goals of students. In the current education system of vocational colleges, student management, and counseling is a complex system that encompasses managing students' daily behaviors, tracking academic progress, providing mental health counseling, and career planning counseling, among others. This system focuses on enhancing students' potential to be ready for learning, self-development, and growth in their future career paths (Shao, 2024: p.1).

Hechi University, located in the Guangxi Zhuang Autonomous Region of the People's Republic of China, is a university that focuses on teaching in various disciplines and is supported by the government of the Guangxi Zhuang Autonomous Region. The university originated from the establishment of the Yishan Guangxi Teacher Training School in 1951 and began offering higher education at the associate degree level in 1978. Later, in April 2003, it was approved by the Ministry of Education to upgrade to a full-time undergraduate institution. Currently, the university has a total of 13 faculties and offers 50 undergraduate programs (of which 3 programs are temporarily not accepting students). Students come from 19 provinces (autonomous regions and municipalities) across the People's Republic of China, with a total of 12,417 full-time undergraduate and associate degree students and 676 faculty members.

The university operates under a management system that emphasizes cooperation between the autonomous region and Hechi City, with the autonomous region primarily responsible for oversight. Teaching and learning cover 9 main disciplines. The university is committed to responding to the needs of society as a priority, focusing on promoting quality education while developing practical skills and fostering the spirit of innovation among students. Additionally, student club activities are diverse, with a total of 44 clubs currently. The goal of the university's human resource development is to produce graduates with a solid knowledge base, good practical abilities, an innovative spirit, and a commitment to working professionally as high-quality personnel who can apply their skills effectively (Hechi University, 2024: p. 1).

There are several issues in the management of student guidance. Firstly, the student guidance system of some institutions is still incomplete due to a lack of systematically designed



curricula and a shortage of specialized faculty. Secondly, the guidance lacks relevance and effectiveness, making it difficult to fully meet the diverse needs of students. Thirdly, the guidance is not comprehensive, resulting in some students not receiving effective assistance promptly when facing problems. Lastly, the assessment and feedback system for guidance is still incomplete, making it challenging to accurately measure the effectiveness of guidance and to continuously improve it (Li, 2021: pp. 89-93).

Given the background and significance of these issues, the researcher is interested in studying the conditions and management approaches of the educational guidance system at Hechi University, People's Republic of China. To provide useful information that can serve as a guideline for enhancing student counseling, as well as supporting the development of a systematic, professional, and modern student counseling system to create conditions conducive to the development and success of students at a higher level.

Research Objectives

- 2.1. To study the state of educational counseling management at Hechi University, People's Republic of China.
- 2.2 To explore management approaches for educational counseling at Hechi University, People's Republic of China.

Research Methodology

3.1 Population and Sample Group

The population for this research consists of faculty members affiliated with Hechi University, People's Republic of China, for the academic year 2024, with 13 faculties and a total of 676 faculty members. The sample group for this research includes 248 faculty members from Hechi University, People's Republic of China, for the academic year 2024, determined according to the Krejcie and Morgan table (Krejcie & Morgan, 1970: 608-610; cited in Prasit Suwanrak, 1999: 148-149) and obtained through cluster random sampling. The target group for interviews consists of 5 individuals, including 2 deans, 2 deputy deans for education, and 1 faculty member responsible for educational counseling, selected through purposeful sampling.



- 3.2 The instruments used in this research include two types: a questionnaire and a semistructured interview
 - 3.3 Development and quality assessment of the instruments.
- 3.3.1 Questionnaire: A review of documents, articles, and research related to student guidance management was conducted to establish a conceptual framework for creating the questionnaire. A draft of the questionnaire was prepared and presented to the advisor for verification of content, structure, and language accuracy, along with suggestions for improvements to ensure the questions were correct and comprehensive. The revised questionnaire was then submitted to three experts to verify the alignment of the questions with specific definitions to assess content validity.
- 3.3.2 Semi-Structured Interview: Data analysis was conducted from the questionnaire in Section 2 by considering issues with moderate to minimal implementation, or if there was no moderate level, the last two questions with the lowest average from each area were selected. The researcher will use these issues to formulate interview questions, focusing on the following areas: 1) Guidance teaching, 2) Career planning and job guidance, 3) Quality of work guidance, and 4) Student activity guidance.

Research Results

- 4.1 The state of student guidance management at Hechi University, People's Republic of China: Administrators and faculty have an overall opinion regarding the state of educational guidance management at Hechi University, People's Republic of China, which is rated at a high level ($\bar{x} = 3.57$). When considering each area, it was found that the areas with the highest average are career planning and employment ($\bar{x} = 3.59$) and student activity guidance ($\bar{x} = 3.59$). The next uidance in teaching management ($\bar{x} = 3.65$), and the area with the lowest average is labor quality guidance ($\bar{x} = 3.54$)
- 4.2 Guidelines for Educational Guidance Management at Hechi University, People's Republic of China, can be summarized as follows:
- 1) In the area of teaching guidance, the university should enhance the teacher training system, encourage faculty participation in academic exchanges and special training both domestically and internationally, and elevate academic and research skills. It should support



personalized learning, online learning, psychological counseling, and career planning to help students solve learning and development problems and promote comprehensive growth.

- 2) Regarding career planning and employment, the university should build partnerships with organizations and industries to understand trends and demands in the job market through market research, enhance competitiveness in employment, and utilize Big Data and artificial intelligence (AI) for job market analysis. It should create a graduate tracking system, establish an alumni network, and develop online communication platforms to promote interactive exchanges between graduates and current students, share professional experiences, and help current students prepare for employment, thereby increasing their professional competitiveness.
- 3) Regarding labor quality guidance, the university should establish a system for volunteer services and skill training, encourage students to participate in social welfare activities and skill competitions and enhance their sense of social responsibility, teamwork spirit, and practical skills.
- 4) In terms of student activity guidance, the university should promote student involvement in planning activities, organizing events, improving student project management, and developing teamwork skills.

By establishing a planning team led by a group of students and organizing training and allocation.

Discussion of Results

From the analysis of the conditions and management approaches of student affairs at Heze University, People's Republic of China, the results can be discussed according to the objectives as follows:

(1) Guidance in Teaching

The university should create a system for training teachers, encouraging them to participate in academic exchanges and special training both domestically and internationally, and enhancing academic and research skills through academic activities and financial support. Additionally, the university should establish a continuous feedback system for evaluating teachers, integrating teaching results and student feedback to help teachers improve their teaching methods and promote teaching innovations through competition and experience exchange.



This aims to improve the quality of teaching and the overall quality of students, in line with the theory of (Hou, 2021: pp. 36-44), which researched the teaching of ideology and politics in general education curricula at universities, stating that teachers' participation in continuous academic activities and training will enhance teaching skills and academic standards, thereby promoting the comprehensive quality development of students. Furthermore, the university should increase online courses, integrate educational resources to support personalized learning and enhance the learning experience through video explanations. The university should also create a system to support online learning and provide academic advising, psychological counseling, career planning, and other services.

To help students solve problems in learning and development and to promote holistic growth, which aligns with the research findings (Lei, 2019: pp.32-35) in the study on the analysis of the current situation and problems in the implementation of health education and mental health curriculum in universities today, indicating that a comprehensive online learning support system can help students better cope with challenges in learning and development and promote their personal growth.

(2) On career planning and employment

Universities should collaborate with organizations and the industry to understand trends and demands of the industry through labor market research, expert lectures from the industry, and organizational exchanges to provide accurate employment guidance to students and improve curricula based on research findings to enhance employ ability competitiveness. Big Data and artificial intelligence (AI) technologies should also be utilized in labor market analysis to help students forecast personal employment trends and receive career development suggestions, as well as to create communication bridges between students and organizations through various activities such as trade shows and industry seminars, which aligns with the research of (Yan, 2024: pp. 136-138) on the current situation and strategies for improving career planning education management for students, stating that universities should engage in organizational operations and research in the industry by delving into organizations, understanding workplace environments, and grasping recent developments and trends in the industry, inviting industry experts and business representatives.



To communicate face-to-face with students, helping them understand the specifics and requirements of various career fields. Additionally, universities should create a comprehensive graduate tracking system and feedback mechanisms to gather employment data and career development information, enhance the effectiveness of career counseling services, and provide necessary career support to graduates. This can be achieved through alumni networks and online communication platforms, promoting interaction between alumni and current students, sharing professional experiences, helping current students prepare for employment, and increasing their competitiveness, which aligns with the research findings (Yang, 2022: p.58) in the study on the current situation and coping measures for career planning education in technical colleges. The research suggests that a graduate tracking system should be established, along with recommendations to gather opinions and feedback from graduates and relevant employers regarding the university's competency training, by understanding information about graduates' employment status, career development, and personnel adaptation, to serve as a crucial foundation for continuous improvement in education and career planning.

(3) Regarding labor quality guidance

Universities should establish a system for volunteer services and comprehensive labor skill training, encouraging students to participate in social welfare activities and skill competitions, enhancing their sense of social responsibility, teamwork spirit, and practical skills in the context of volunteer services. Universities can provide a variety of volunteer service opportunities by collaborating with communities, non-profit organizations, and government agencies, and establishing a system of rewards and penalties to encourage student participation, as well as increasing motivation through credits or certificates. This aligns with the ideas (Guo, 2018: pp. 51-54) in the research concept regarding educational research and labor management in universities. Considering the incomplete content of labor education and the unreasonable labor evaluation system, this study suggests enhancing the content and forms of labor through a combination of on-campus and off-campus efforts via public welfare labor and volunteer services and using the model of volunteer labor with a credit unit volunteer model or credit distribution to promote student participation in volunteer service activities.

Furthermore, universities should regularly organize labor skills competitions to cultivate practical skills and a work ethic, invite experts to participate in mentoring according to industry



needs, and provide useful information and industry development to students. Universities should also provide follow-up skill training to enhance student quality and competitive skills for employment, which aligns with the research of (Huang, 2023: pp. 75-76) on educational administration issues related to labor and coping measures in vocational colleges, with a case study in Guangdong Province. The research findings indicate the necessity of fostering students' labor quality in daily life and training students to acquire relevant professional skills to enhance their competitive employ ability.

(4) Student Activity Guidance

The university should promote student participation in planning activities and organizing and improve student project management and teamwork skills by establishing planning teams led by student groups and providing training and resource allocation. This will foster leadership, communication skills, and creativity. Additionally, the university can establish a student representative committee or planning group to serve as a communication bridge to gather feedback and suggestions from students, ensuring that various activities meet student needs. This aligns with the ideas of (Li. 2018: p.83) in the research on the importance and strategies for conducting extracurricular activities in universities. This research indicates that universities allow students to form student associations and various extracurricular clubs based on their hobbies and interests, using their extracurricular time to participate in and establish associations and clubs in various forms to exchange information and experiences, which enhances students' skills.

Furthermore, the university should integrate academic curricula with extracurricular activities to promote students' understanding of the curriculum content, encourage faculty to design relevant practical activities and promote the application of theoretical knowledge. The university should also combine social needs and trends in academic development to conduct extracurricular social activities for students to enhance the quality and capacity for students' career development, which corresponds with (Wu. 2020: pp. 122-124) who researched the topic.

Research on student involvement in extracurricular activities, employment, and relationships. This research suggests that the level of social involvement in extracurricular activities significantly impacts students' employ ability, and universities should seriously organize extracurricular activities that benefit students' career development.



Recommendations

- (1) There should be research on the development of student guidance management models.
- (2) Factors affecting student guidance management should be studied.
- (3) The student guidance management methods of other universities should be examined.

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The State and Guidelines for Student Affairs Administration of Hechi University, People's Republic of China

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Abstract

This research aims to 1) study the management of student affairs at Hechi University, People's Republic of China, and 2) explore the guidelines for managing student affairs at Hechi University, People's Republic of China. The sample for this research consisted of 248 faculty members from Hechi University, People's Republic of China, for the academic year 2024, and a target group of 5 people for interviews. The research instruments included 1) a questionnaire and 2) a semi-structured interview. The statistical methods used for data analysis included percentage, mean, and standard deviation. The research findings indicate that the guidelines for managing student affairs at Hechi University, People's Republic of China, can be summarized as follows: 1) Regarding ideological and political education, the university should clarify its position and role in ideological and political education. Faculty members should participate in creating content and guiding students according to their responsibilities, as well as promoting external organizations to engage in expanding educational content to be broader and deeper. The academic format should be diverse, with activities that encourage students to participate and experience firsthand, and students should be supported in understanding responsibility through leadership in conducting activities, planning, implementation, and management.

In terms of university fund management, there should be a dedicated scholarship management system to ensure that the scholarship awarding process is transparent and



standardized and to enhance efficiency through electronic file recording and automated approvals. The management of scholarships should be fair, with collaboration with social enterprises to provide part-time job opportunities outside the university, helping students gain experience and improve their practical skills. Additionally, this should strengthen communication with parents, ensuring they understand student involvement and provide full support.

Regarding mental health management, the university should utilize various channels to promote mental health knowledge and organize mental health activities to increase student interest in mental health. There should be a mental health education curriculum, and a professional psychological counseling center should be established to provide individual and group counseling, as well as crisis intervention services. High-risk groups should be monitored through surveys, and regular visits to students receiving counseling should be conducted to ensure they receive adequate support in learning, life, and social interactions.

In terms of dormitory management, the university should establish a dormitory committee with faculty and student participation to regularly discuss dormitory management issues. There should be a transparent online communication channel, and management measures should be promptly adjusted to enhance safety in the dormitories. Access control systems should be installed.

There is real-time recording to ensure that students enter the dormitory safely and on time. In addition, equipment must be regularly checked. The monitoring system and intelligent alarm mechanism will function effectively when encountering abnormal situations. 5) In terms of employment management and entrepreneurship, universities should incorporate career development courses into their teaching plans, systematically design vocational skills training, and integrate it with vocational curricula, emphasizing soft power for students. There should be collaboration with organizations and industry associations, organizing lectures, and panel discussions, and providing internship opportunities to enhance practical experience and students' employability. Job fairs should be held regularly, and information should be widely disseminated through online and offline channels to ensure students receive accurate job opportunities.

Keyword: Student affairs management, student affairs management guidelines, Hechi University, People's Republic of China



Introduction

Educational management in universities is the foundation that allows teaching activities in universities to proceed steadily and effectively, with students being the primary target. Therefore, it is necessary to manage students or all teaching activities, which can guarantee that students learn and live better in the university. Planning the organizational structure of university education is very important for educators to promote the development of university education. Thus, it is essential to keep the educational management system of the university modern, maximizing the efficiency of the university's educational process (Zhang, Liu & Zhang, 2023: p. 1).

Hechi University, located in the Guangxi Zhuang Autonomous Region of the People's Republic of China, is a university that focuses on teaching in various fields and is supported by the government of the Guangxi Zhuang Autonomous Region. The university originated from the establishment of the Yishan Guangxi Teacher Training School in 1951 and began offering higher education at the associate degree level in 1978. In April 2003, it was approved by the Ministry of Education to be upgraded to a full-time undergraduate institution. Currently, the university has a total of 13 faculties and offers 50 undergraduate programs (of which 3 programs are temporarily closed for enrollment). Students come from 19 provinces (autonomous regions and municipalities) across the People's Republic of China, with a total of 12,417 full-time undergraduate and associate degree students, and 676 faculty members.

The university operates under a management system that emphasizes cooperation between the autonomous region and the city of Hechi, with the autonomous region as the main supervisory body. The teaching and learning cover 9 major fields, with the university committed to responding to social needs, focusing on promoting quality education, developing practical skills, and fostering students' innovative spirit. Additionally, student association activities are diverse, with a total of 44 student associations. The university's goal in developing human resources is to produce graduates with a solid knowledge base, good practical abilities, an innovative spirit, and a commitment to working professionally as high-quality personnel who can apply their skills in the workplace (Hechi University, 2024: p. 1).

The management of student affairs is an important part of administration in educational institutions. It plays a crucial role in achieving personnel development goals in universities. Currently, student affairs management is facing challenges during this period of societal change,



making it essential to improve management concepts and establish clear working methods. The operational model of student affairs management in universities must incorporate humility, learn, and seriously study beneficial experiences from various countries, and adapt them appropriately to the context of domestic universities (Zhang. 2012: p. 1).

Currently, in the operation of teaching and learning in educational institutions, student affairs management is a significant component and has an influence on promoting and developing students. Therefore, in the reform and development of higher education institutions, it is necessary to understand the meaning of student affairs and implement effective working models to meet the needs for student development, addressing the shortcomings in student affairs operations. It is currently essential to foster and integrate innovation and clear concepts, distribute tasks among agencies, and elevate the quality of staff working in this area, as well as utilize network information technology to create a system for student affairs operations to ensure stable improvement in the performance of student affairs (Li. 2019: p. 438).

Given the background and importance of the aforementioned issues, the researcher is interested in studying the conditions and management approaches of student affairs at Hechi University, People's Republic of China, to understand the state and management strategies of student affairs that respond to new challenges and the demands of development in this era, based on the background and significance of this issue.

The researcher has developed an interest and hopes to find ways to improve effective management through studying student affairs management at Hechi University, People's Republic of China, to enhance management efficiency, respond to future changes, and provide guidelines for universities and other educational institutions.

Research Objectives

- 1. To study the state of student affairs management at Hechi University, People's Republic of China.
- 2. To study the approaches to student affairs management at Hechi University, People's Republic of China.



Research Methodology

1. Population and Sample

The population for this research consists of faculty members affiliated with Hechi University, People's Republic of China, for the academic year 2024, which includes 13 faculties with a total of 676 faculty members. The sample for this research includes 248 faculty members affiliated with Hechi University, the People's Republic of China, for the academic year 2024, determined based on the Krejcie and Morgan table (Krejcie & Morgan, 1970: 608-610; cited in Prasert Suwanrak, 1999: 148-149) obtained through cluster random sampling.

The target group for interviews consists of 5 individuals, including 2 deans, 2 associate deans for education, and 1 faculty member responsible for academic advising, selected through purposive sampling.

- 2. The research tools used in this study include two types of instruments: a questionnaire and a semi-structured interview.
 - 3. Development and Quality Assessment of the Instruments
 - 3.1 The questionnaire has been developed through a document study.

Articles and research related to student affairs management set the framework for creating a questionnaire and drafting the questionnaire. The developed questionnaire is presented to the advisor for content, structure, and language accuracy review, and suggestions for improvement to ensure the questions are correct and comprehensive. The revised questionnaire is then given to experts to check the alignment of the questions with specific definitions to determine content validity, with a total of 3 experts.

3.2 Semi-Structured Interview: Data analysis from the questionnaire section 2 was conducted by considering issues with a moderate to minimal level of implementation, or if there is no moderate level, the last 2 questions with the lowest average will be selected from each aspect. The researcher will use these issues to create interview questions on the following topics: 1) Ideological and political management, 2) Financial assistance management, 3) Mental health management, 4) Dormitory management, and 5) Employment and entrepreneurship management.



Research Results

- 1. The state of student affairs management at Hechi University, People's Republic of China: Administrators and faculty have opinions regarding the state of student affairs management at Hechi University, People's Republic of China, which is overall at a high level ($\bar{x} = 3.64$). When considering each aspect, the highest average is in the area of ideological and political education ($\bar{x} = 3.72$), followed by financial management ($\bar{x} = 3.65$), and the lowest average is in mental health management ($\bar{x} = 3.59$).
- 2. The management approach for student affairs at Hechi University, People's Republic of China, can be summarized as follows: 1) In the area of ideological and political education, the university must clearly define its position and role in ideological and political education. Faculty members should participate in creating content and guiding students according to their responsibilities, as well as encourage external organizations to participate in expanding educational content to be broader and deeper. The educational format should be diverse, with activities that encourage students to engage and experience firsthand, and support should be provided for students to learn about responsibility through leadership in activities, planning, implementation, and management. 2) In terms of managing university funds, a specific scholarship management system should be established to ensure transparency and standards in the scholarship allocation process, enhancing efficiency through electronic file recording and automatic approval. Scholarship management should be fair, with cooperation with social enterprises to provide parttime job opportunities outside the university, helping students gain experience and improve their practical abilities. Additionally, communication with parents should be strengthened to ensure they understand student involvement and provide full support. 3) In the area of mental health management, the university should use various channels to promote mental health knowledge and organize mental health activities to increase students' interest in mental health. A mental health education curriculum should be established, and a professional psychological counseling center should be set up to provide individual and group counseling.
- (1) Crisis intervention services should be provided, and high-risk groups should be monitored through surveys. Students who have received counseling should also be regularly visited to ensure they receive adequate support in learning, life, and social interaction.



- (2) In terms of dormitory management, the university should establish a dormitory committee with participation from both faculty and students to discuss dormitory management issues regularly. There should be a transparent online communication channel and timely adjustments to management measures to enhance safety in the dormitories. Access control systems should be installed, with real-time recording to ensure students can enter the dormitories safely and on time. Additionally, equipment should be regularly checked, and an intelligent monitoring and alert system should be in place to respond effectively to abnormal situations.
- (3) Regarding employment management and entrepreneurship, the university should integrate career development courses into the curriculum, systematically design vocational training programs, and integrate them with professional courses, emphasizing soft power for students. Collaboration with organizations and industry associations should be established to organize lectures, panel discussions, and internship opportunities to enhance practical experience and students' employability. Job fairs should be held regularly, and promotions should be conducted widely through online and offline channels to provide students with accurate employment opportunities.

Discussion of Results

Based on the analysis of the conditions and management approaches of student affairs at Hechi University, People's Republic of China, the results can be discussed as follows:

(1) In terms of ideological and political education.

The university clarifies the roles and positions in the field of ideological and political education, such as professors, advisors, and faculty members responsible for student affairs. Administrators assess and provide feedback on the quality and appropriateness of the curriculum content, recommending the use of diverse teaching methods and strategies, broadening the scope of education, and designing an integrated curriculum that connects students' lives with the realities of learning. The curriculum is designed to align with students' interests, using popular topics to educate about current situations, enhancing diverse educational formats, and utilizing online platforms, historical site visits, mock trials, and other activities to increase student engagement and experiences.



This aligns with the theory (Sun, 2020: p. 70), which states that in the working methods of teachers, specificity should be prioritized, meaning that educational activities in ideological and political education should focus on the diversity of students. In educational content, modernity should be emphasized, integrating ideological and political education with international, national, and societal contexts. In terms of educational methods, innovation should be prioritized through formats that students enjoy and find fulfilling, enhancing the appeal of ideological and political education comprehensively. This approach not only increases student interest but also helps them understand social changes.

Furthermore, to enhance students' sense of responsibility, the university must encourage students to take leadership roles in activities through planning, implementation, and management, in line with the theory (Zhang, 2024: p. 128). Universities need to enhance online education pathways, breaking down the limitations of traditional ideological and political education, allowing students more freedom to learn, and effectively improving the effectiveness of ideological and political education so that students can be more capable, achieve results, and succeed efficiently.

(2) On the management of funds

In managing the funds of Hechi University, particularly in scholarships and funding support for diligent students, the university should create a specialized fund management system to ensure that the allocation of funds is fair, transparent, and standardized, enhancing management efficiency through electronic file recording and automated approval. This aligns with the theory of Qin (2017: p. 41), which states that the identification of impoverished students must consider fairness and efficiency, creating a complete system with well-maintained records to make the most of limited funds and effectively assist underprivileged students who genuinely need help.

Furthermore, regarding funding support for diligent students, the university must provide a variety of job placements and collaborate with social enterprises to enhance opportunities for students to obtain part-time jobs from external organizations and develop their work skills. This is consistent with the theory of Huang & Chen (2024: p. 50), which states that these universities allow economically disadvantaged students to take on responsibilities in various positions, receive compensation, and face social pressure. Additionally, the university should strengthen communication with parents.



To help parents understand the situation regarding student involvement and to support students, which aligns with the theory of (Wang, 2018: p. 27) that states when facing issues with scholarship students, family factors must be considered, and parents should be contacted immediately to guide students in collaboration. By using this method, the university not only provides economic support to students but also helps and enhances their overall development capabilities.

(3) In terms of mental health management

In the area of mental health management at Hechi University, the university utilizes various channels to disseminate mental health knowledge and regularly organizes related activities to increase interest and emphasize the importance of student health. Furthermore, the university should provide a comprehensive mental health curriculum that includes stress management and emotional regulation to help students develop self-control skills, which aligns with the perspective of (Wang, 2020: p. 10) that states undergraduate universities must integrate psychological activities with developmental regulations, incorporate psychological education into the core curriculum, and use classrooms as a bridge to convey knowledge, experience psychological practices, and train emotional regulation skills.

Additionally, the university should regularly check in on students receiving counseling through surveys or other methods to gather feedback, understand changes, and adjust support plans accordingly. It is also necessary to verify that students are receiving support in areas such as academics, daily living, and social interactions, which aligns with the actions of (Chang, 2023: p. 41). The text highlights the prevention of mental health issues, stating that after providing psychological counseling to students, a work file must be created to immediately track students' symptoms and prevent severe situations, allowing timely assistance to students.

(4) Regarding dormitory management

In the management of dormitories at Hechi University, the university must establish a dormitory committee that includes both faculty and students. Regular discussions about dormitory management issues should take place, and a transparent online channel should be created to adjust management measures promptly. This aligns with what Zhang (2019: p. 11) stated, that the student dormitory management committee plays a crucial role in managing student dormitories, which can strengthen students and facilitate the smooth completion of dormitory management tasks.



Additionally, to enhance dormitory safety, the university should install access control systems and real-time recording to ensure students can enter the dormitory safely and on time. Regular checks of equipment should also be conducted, and in case of abnormal situations, the system should function effectively. This is consistent with the idea of Zhang (2022: p. 13), which states that universities need to create an intelligent automated system to enhance efficiency, including recording entries and exits for external individuals entering the dormitory, approving student accommodations, repairing in-room equipment, and more.

(5) Regarding employment management and entrepreneurship

In the area of employment management and entrepreneurship at Hechi University, the university should incorporate career development courses into the curriculum.

Design a systematic training program for vocational skills integrated with vocational curricula, focusing on soft power for students, such as resume writing, interview skills, and workplace communication. Courses are organized according to different grade levels, with lower grades emphasizing career interest exploration and industry understanding, while higher grades focus on readiness and regulations in the field to enhance practical experience and students' employability. This approach aligns with Wang (2020: p. 11), which discusses career guidance and entrepreneurship in universities, using the concept of "work processes" as a foundation. It divides the entire career guidance and entrepreneurship process for university students into reasonable segments, distinguishing between specific learning and targeted training.

Furthermore, universities should collaborate with the business and industrial sectors to organize lectures, career seminars, and activities that regularly provide opportunities for practical experience, enabling students to accumulate experience and job opportunities. These efforts not only enhance capabilities but also align with research by Song (2023: p. 20), which suggests that universities collaborate with external businesses to provide students with real-world practice, elevate specialized skills, and increase avenues for job searching and hiring, thereby improving students' work success rates. Additionally, collaboration between universities and the business sector promotes positive interactions and creates a win-win relationship, benefiting both parties without anyone being at a disadvantage.



Recommendations

- (1) There should be differences in student administration practices under different cultural backgrounds.
- (2) There should be research on student management systems that utilize artificial intelligence.
- (3) There should be a study of the student management methods of each faculty for students in different majors.

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The Current State, Ideal State, and the Needs for Enhancing the Academic Leadership of Elementary School Teachers in Rural Area in Hubei Province

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Abstract

The study of the current state, ideal state, and the needs for enhancing the academic leadership of elementary school teachers in rural area in Hubei Province utilized a combination of quantitative and qualitative methodologies. This research aimed to study the key components of performance indicators and to investigate the current state, ideal state, and the needs for enhancing the academic leadership of elementary school teachers in rural area in Hubei Province. The data were collected through expert interviews, focus groups, and questionnaires with a targeted sample data. The research tools included semi-structured interviews and rating scale questionnaires. The analysis used descriptive statistics mean, standard deviation and inferential statistics PNI Modified. The results identified three key components: 1) Teaching Leadership, 2) Charismatic Leadership, and 3) Team Leadership. The current state was at moderate level (mean = 3.85, S.D. = 0.95); the ideal state was at highlevel (mean = 3.89, S.D. = 1.06). The needs analysis highlighted teaching leadership as the most needed (PNI modified = 0.21), while the analysis indicated that the least needed was charismatic leadership (PNI modified = 0.18).

Keyword: Academic Leadership, Need Assessment, Elementary School Teachers in Rural Area



Introduction

Education is the cornerstone of national development and an important component of human resource development. Therefore, education is of great value. The development of education is a national policy and practice, especially the development of teachers. Because teachers are the key figures of education, without teachers with expertise, it is difficult to cultivate children and young people to grow into quality adults. As President Xi Jinping said in a speech on April 19, 2021, at Tsinghua University, "The key to improving the quality of education is teachers, and the essence of teachers is teaching. Teachers' strong leadership is directly related to the quality of each class, as well as the learning and growth of each student, and directly affects the development and progress of teachers." Therefore, the growth of students is inseparable from teachers. Whether it is teaching knowledge or inspiring personality and morality, the leadership role of teachers is very important and cannot be ignored. (Xi, 2021, p. 1)

Between 2010 and 2020, the Chinese government promulgated the National Medium and Long-Term Education Reform and Development Plan, underscoring the pivotal role of teacher development in advancing educational reform and enhancement. The plan emphasized the imperative to bolster the cultivation of educators and elevate their professional caliber, aspiring to establish a teaching workforce characterized by ethical integrity, expertise, a balanced composition, and dynamic vigor. To bolster the collective proficiency of educators at the primary and secondary levels, the Chinese government promulgated the "Opinions of the State Council on Strengthening Teacher Training," delineating explicit criteria for educators' quality encompassing professional ethics, educational philosophy, subject-specific knowledge, and pedagogical competencies. This initiative positions the development of the teaching workforce as the paramount foundational endeavor within the educational reform and advancement agenda. Furthermore, the Ministry of Education introduced directives aimed at deepening the reform of the professional title system for primary and secondary educators. These guidelines pioneer in affording primary and secondary educator's equitable opportunities for career progression akin to those available to academic lecturers and researchers. Such policies provide a supportive framework for the evolution of a more diverse array of teaching roles, thereby fostering the ongoing professional development of educators at the primary and secondary levels. (Government of China, 2010, p.1)



In 2018, the Central Committee of the Communist Party of China, in conjunction with the State Council, promulgated the "Concept of Deepening Reform on Building a New Era Teacher Team." This document advocated for the cultivation of comprehensively competent educators within the compulsory education sector, with the goal of establishing a cadre of innovative, high-caliber, and specialized teaching professionals. This concept of modernization was further articulated in 2019, with the Central Committee of the Communist Party of China and the State Council advancing the "Concept of Modernizing China's Education." This initiative underscored the importance of bolstering the ethical standards of educators, systematically orchestrating their professional advancement, fostering a culture of lifelong learning, and nurturing professional autonomy, all in the pursuit of developing a cohort of high-quality, professional educators. (Central Committee of the Communist Party of China and State Council, 2018, p. 1)

Moreover, in 2018, the Ministry of Education unveiled an action plan aimed at revitalizing teacher education, which is designed to holistically enhance the quality and competencies of educators. This plan is a strategic response to the evolving demands of the educational landscape and is intended to ensure that the teaching force remains at the forefront of educational innovation and excellence. (Ministry of Education, 2018, p. 1)

The significance and context of this issue have captivated the researcher's interest in conducting a comprehensive study of the key components of performance indicators for enhancing the academic leadership for elementary school teachers in rural area in Hubei Province and investigating the current state, ideal state, and the needs for enhancing the academic leadership for elementary school teachers in rural area in Hubei Province. This study will contribute to the development of a model to enhance academic leadership for elementary school teachers in rural area in Hubei Province in the future, aimed at further improving teachers' competencies. Such progress will significantly benefit efforts to elevate the quality of education and promote educational development in rural areas. By focusing on improving teaching quality to better meet students' learning needs, it will drive overall educational advancement.

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Objectives

This research consisted of two objectives:

- 1. To study the key components of performance indicators for enhancing the academic leadership for elementary school teachers in rural area in Hubei Province.
- 2. To investigate the current state, ideal state, and the needs for enhancing the academic leadership for elementary school teachers in rural area in Hubei Province.

Research Methodology

The research methodology was divided into two phases:

1. **Phase 1:** Studying the key components of performance indicators for enhancing the academic leadership for elementary school teachers in rural area in Hubei Province.

1.1 Target group

The target group used in this phase included 10 experts obtained by Purposive Sampling method. They work in the field of university and elementary school education management in rural area.

1.2 Research Instruments

A semi-structured interview form was utilized as the primary research instrument during this phase.

1.3 Data Collection

The researcher collected data through the following methods:

- 1) Literature review: The researcher conducted a thorough search of literature from educators, academics, this paper studied the components of academic leadership of elementary school teachers in rural area in Hubei Province.
- 2) Semi-structured interview: The researcher conducted semi-structured interviews with 10 experts to gather further insights and information on the topic.

After completing data collection in Phase two, the researcher used the information obtained to refine and adjust the components identified in Phase one, aiming to make them more comprehensive and accurate.

1.4 Data Analysis

The researcher employed content analysis to analyze the data collected in Phase 1.



- **2. Phase 2**: Investigating the current state, ideal state, and the needs for enhancing the academic leadership for elementary school teachers in rural area in Hubei Province.
 - 2.1 Population and samples were divided into two groups:

The population for this phase consisted of 320 teachers from elementary school in rural area in Hubei province, which representing entire study population.

2.2 Research tools:

The quantitative data collection tool was a questionnaire about the needs and necessity of improving the academic leadership ability of elementary school teachers in rural area in Hubei Province. The questionnaire was mainly created according to the definition of purpose and words. 5 experts were invited to check the accuracy of the content by looking for the consistency indicators of the questions. The IOC value was equal to 1.00. The researchers used the questionnaire to conduct a trial in 30 people (non-target population) working in elementary school in rural area in Hubei Province to find a simple correlation coefficient between the scores of each item and the total score. The correction item-total correlation range for the current situation is 0.49-0.95, while the correlation range for the ideal state is 0.40-0.97. The reliability of the questionnaire for the current state was equal to 0.99, while the reliability of the ideal state is equal to 0.99.

3. Data analysis:

- 3.3.1 Data analysis using basic statistics such as percentage, mean, deviation, and standard and PNI modified qualitative data used content analysis.
- 3.3.2 Priority Needs Index (PNI) analysis Modified and sort the values in order from highest to lowest.

The calculation formula is PNI Modified = (I-D)/D.

PNI stands for Priority Needs Index.

I (Important) stands for the average value of the state that it should be.

D (Degree of Success) stands for the average of the current conditions.

Corresponding PNI Modified value, indicating which items have a higher or lower level of necessity compared to others. Items with high PNI Modified values indicate a greater level of necessity and should be given priority in terms of attention and improvement. Therefore, it is important to prioritize and address these needs first.



Results

According to the research objectives, the research results are divided into the following two parts:

- 1. Components of the academic leadership improvement of elementary school teachers in rural area in Hubei Province.
- 1.1 The researcher conducted a comprehensive review of documents, textbooks, and related research, synthesizing the elements. The components are: Teaching Leadership, Charismatic Leadership, Team Leadership.
- 1.2 By interviewing experts, the following elements were obtained: Teaching Leadership, Charismatic Leadership, Team Leadership.

Subsequently, the researcher obtained the synthesized components and elements that will be utilized in the research as detailed below:

- 1) Teaching Leadership
- 2) Charismatic Leadership
- 3) Team Leadership
- 2. The needs for enhancing the Abilities for academic leadership of elementary school teachers in rural area in Hubei Province.
- 2.1 The researchers conducted a questionnaire survey among 320 elementary school teachers in rural area in Hubei Province. The data results were shown in Table 1.

Table 1

Mean, Standard Deviation, and Priority Needs Index of the Components for Enhancing the Academic Leadership for Elementary School Teachers in Rural Area in Hubei Province, Overall and Dimensions

Commonweate		Curren	t state (D)		Ideal	state(I)	$\mathbf{PNI}_{\mathbf{modified}}$	Order
Components		S.D.	Level		S.D.	Level	(I-D)/D	of need
1- Teaching leadership	3.81	0.89	High	4.55	0.64	Highest	0.19	1
2-Charismatic leadership	3.94	0.87	High	4.60	0.60	Highest	0.14	3
3- Team Leadership	3.89	0.88	High	4.60	0.61	Highest	0.15	2
Total	3.88	0.88	High	4.58	0.62	Highest	0.16	



As shown in Table 1, it was found that the overall current state of the components for enhancing the academic leadership for elementary school teachers in rural area in Hubei Province was at a high level ($\bar{x} = 3.88$, S.D. = 0.88). When considering each component, it was found that the average is ranked in descending order, including the highest mean score, which was charismatic leadership ($\bar{x} = 3.94$, S.D. = 0.87), followed by team leadership ($\bar{x} = 3.89$, S.D. = 0.88), and teaching leadership ($\bar{x} = 3.81$, S.D. = 0.89).

The overall ideal state of the components for enhancing the academic leadership for elementary school teachers in rural area in Hubei Province was at the highest level ($\bar{x} = 4.58$, S.D. = 0.62). When considering each component, it was found that the average is ranked in descending order, including the highest mean score, which was charismatic leadership ($\bar{x} = 4.60$, S.D. = 0.60) and team leadership ($\bar{x} = 4.60$, S.D. = 0.61), followed by teaching leadership ($\bar{x} = 4.55$, S.D. = 0.64).

When considering each element, it was found that the order of the needs of the components for enhancing the academic leadership for elementary school teachers in rural area in Hubei Province was arranged in order of the needs from the greatest to the least. The component that needed enhancing the most was teaching leadership ($PNI_{modified} = 0.19$), while the charismatic leadership was the least ($PNI_{modified} = 0.14$).

Discussion and Conclusion

According to data analytics, elementary school teachers in rural area of Hubei province have improved needs in terms of teaching leadership, charismatic leadership, and team leadership. The following points are discussed in accordance with the research findings:

1. The researcher identified three components of academic leadership for elementary school teachers in rural area in Hubei province: teaching leadership, charismatic leadership, and team leadership. Preliminary findings from this study indicate that there is potential for growth in the skills of elementary school teachers in rural area in Hubei province, particularly in the areas of teaching leadership, charismatic leadership, and team leadership within the context of the People's Republic of China. Among these, teaching leadership stands out as the most critical area for improvement. Following closely behind is the need to improve team leadership, while educators demonstrate a positive attitude toward the development of their personal charismatic leadership.



This study's findings highlight the significance of teaching leadership as a transformative capacity within educational contexts. The integration of instructional expertise, charismatic influence, and collaborative engagement serves as a catalyst for innovation and educational advancement. This combination of leadership abilities not only supports individual and collective growth but also fosters a culture of teamwork and professional resilience within schools. Enhancing academic leadership requires deliberate and strategic efforts focused on advancing instructional proficiency, fostering charismatic leadership, and building robust collaborative relationships. These priorities are essential for driving sustained improvements in teaching practices, school culture, and overall educational outcomes. The findings of this study align with the perspectives of Chen (2018, pp. 52-62), who stated that elementary school teacher leadership refers to the common power of innovation. The special talents each teacher has include teaching ability, charismatic leadership, and teamwork. This combined strength reflects the teacher's general ability and activities, ability to develop a culture of teamwork, raise awareness of educational and teaching activities, collaborative research, and professional support on issues in personal life. Moreover, the findings of this study also align with the perspectives of Zhao (2021, pp. 57-63), who stated that teacher leadership is an integrative skill set, categorically involving teaching proficiency, collaborative teamwork, and research acumen. These dimensions underscore the capacity of teachers to act as catalysts for innovation and improvement in educational settings. Teaching ability pertains to the strategic and effective delivery of curriculum content, whereas teamwork emphasizes cooperative dynamics within professional learning communities. Research ability highlights the importance of scholarly inquiry and evidence-based practice in addressing educational challenges and advancing pedagogical methodologies. In addition, the findings of this study align with the perspectives of Rod & Melissa (2022, p. 33), who stated that collaborating with colleagues to build teams and lead them, while providing comprehensive guidance to those aspiring to academic leadership positions, including research leadership roles, constitutes a pivotal aspect of leadership in achieving academic excellence. The findings of this study align with the study of Koh et al. (2018, pp. 231– 248), which explored various leadership styles among teaching leadership, with a particular focus on charismatic leadership and its impact on school climate and teacher job satisfaction. The study found that the various leadership styles among teaching leadership, with a particular focus on charismatic leadership and its impact on school climate and teacher job satisfaction. The study



highlights how charismatic leaders cultivate a positive team atmosphere within schools, thereby enhancing teachers' teaching leadership and fostering collaboration. This leadership style also significantly influences students' learning outcomes by inspiring teachers' enthusiasm, strengthening team cohesion, and promoting a spirit of collaboration. Such environments contribute to creating a superior learning experience for students. Furthermore, the findings of this study align with the study of Harris et al. (2016, pp. 535-551), which examined the role of teacher leadership in facilitating school improvement and found that the different leadership styles, including charismatic leadership, shape school culture. Their study underscores the ability of charismatic leaders to enhance team leadership among teachers, encouraging collective effort and fostering a positive school culture.

2. The research of the needs of the components for enhancing the academic leadership for elementary school teachers in rural area in Hubei Province discovered that teaching leadership was the most critical component that needed to be improved. The reasons for these findings include that teaching quality has a direct impact on educational work in schools, where teaching quality is the primary focus. Teaching leadership can concentrate on the practical application of classroom teaching. These strategies assist teachers in consistently improving their teaching methods and optimizing lesson designs, ensuring that students absorb knowledge and improve their skills in the classroom, hence improving overall teaching quality. Academic leadership has a broader scope, but teaching quality is its foundation. If teaching quality cannot be guaranteed, broader academic advancements lose their foundation of support. Therefore, teaching leadership stands out as paramount in safeguarding teaching quality. Moreover, fostering teacher growth is vital for improving school education. Strong teaching leadership provides a clear path for professional development by regularly offering skills workshops, sharing modern teaching concepts and innovative strategies, and encouraging self-reflection and collaboration among educators. This approach helps build a supportive and forward-thinking professional culture, giving teachers clear goals for growth in their daily work. While other forms of academic leadership often focus on results, teaching leadership emphasizes the foundational importance of teacher growth. By prioritizing ongoing teacher development, schools can create a solid foundation for broader academic progress. This is consistent with the perspectives of Nang H. & Li Y. (2022, pp. 76-84), who highlighted that when Murphy and his colleagues developed the teaching leadership



framework, they identified it as a key driver of school effectiveness. They emphasized that strong teaching leadership is reflected in the ability to oversee critical details across various aspects of school operations, making it a core factor in influencing student achievement. Furthermore, the findings coincide with the opinions of Lu Zhen (2021, p. 10), who investigated the significance of teaching leadership in rural classrooms, focusing on three key aspects: advancing educational equity, preserving local cultural traditions, and promoting teachers' professional development. This perspective reinforces the essential role rural educators play in leading effective classroom instruction. In addition, the findings also align with Wang J. (2024, pp. 14-118), who emphasized that effective classroom teaching is essential for strengthening teachers' teaching leadership. Enhancing this leadership is both a critical research focus and a practical strategy for improving educational quality, refining teaching practices, and advancing higher education reform. Strong teaching leadership not only impacts the quality of teaching but also plays a pivotal role in driving instructional innovation and school improvement. The findings of this study align with earlier research on teacher leadership. Rutherford, C. (2006, p. 1) described teacher leadership as part of professional growth, where teachers actively share and build knowledge to improve their skills and advance their expertise, ensuring they meet educational goals effectively. Similarly, Shi Wanlong and Harris viewed teacher leadership as a specialized skill set. Snell, S. (2000, pp. 103-122) expanded on this idea, emphasizing that effective instructional leadership requires three key abilities: deep subject knowledge, sound decision-making, and strong teamwork skills. Among the most influential models, Harris, A. W. & Lambert, M. J. (1994, pp. 472-479) conducted empirical research and outlined four essential aspects of teacher leadership: personal capacity, professional knowledge and skills, collaborative ability, and the capacity to inspire positive change.

Suggestion

Based on the research findings, here are some recommendations:

1. The study conducted an investigation into the components of academic leadership enhancement for elementary school teachers in rural area in Hubei Province. It identified three key Abilities components related to pedagogical leadership, charismatic leadership, and team leadership. These findings provide a valuable reference for improving the academic leadership capabilities of elementary school teachers in rural area. Although each elementary school in rural



area may have unique circumstances, there are similarities in the job functions of the teachers in the rural area. Therefore, the results of this study can be applied to the capacity-building practices of elementary school teachers in rural area, tailored to their specific realities.

- 2. For future research, this study recommends to develop the model for developing academic leadership competency of elementary school teachers in rural areas in Hubei province or a TPT (Teacher Professional Development) model aimed at enhancing the academic leadership capabilities of elementary school teachers in rural area in Hubei. The model should be developed through interviews with exemplary elementary schools in rural area that have had success in enhancing the academic leadership of their teachers, supplemented by expert symposia. Additionally, a professional development training manual should be compiled. This manual could serve as a reference for enhancing the academic leadership of teachers in other elementary schools in rural area.
- 3. It should conduct the research on the factors influencing the academic leadership for elementary school teachers in rural areas in Hubei Province so that the identified factors can be applied to promote more comprehensive and effective teacher development.

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Need Analysis of Instructional Model Based on Integrated Writing Approach to Enhance Thai University Students' Writing Ability

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Abstract

This study, as part of a research and development project, aimed to: 1) analyze the challenges faced by Thai university students in essay writing, and 2) investigate their needs for an instructional model based on integrated writing approaches to enhance their writing ability. The sample consisted of 68 third-year English majors from the Faculty of Humanities and Social Sciences, Buriram Rajabhat University, who were enrolled in the Essay Writing course (2032103) during the 2024 academic year. Participants were selected through purposive sampling. Data collection involved the use of questionnaires and semi-structured interviews. Quantitative data were analyzed using mean, standard deviation, and descriptive statistics, while qualitative data were examined through content analysis. The findings revealed that students experienced essay writing problems at a moderate level overall. The most significant challenges included vocabulary issues, sentence structure problems, and content-related difficulties. Key causes of these challenges were identified as inadequate time writer's block, and plagiarism. The study also indicated a high overall need for an instructional model to enhance English writing skills. The highest-rated needs included improving vocabulary, grammar and mechanics, and sentence structure. Additionally, the need for an integrated writing approach was rated at a high level, with particular preference for the genre-based approach, followed by the process writing approach and the content-based approach. Other findings are also illustrated in the results of this article. These



findings underscore the demand for an integrated instructional model combining multiple approaches to effectively enhance the writing ability of Thai university students.

Keyword: Need Analysis, Instructional Model, Integrated Writing Approach, Writing Ability

Introduction

Writing is a fundamental skill in English language learning, particularly for university students in EFL contexts like Thailand. Proficiency in writing is critical for academic success and professional advancement, as it requires not only mastery of linguistic elements but also the ability to communicate ideas coherently and effectively (Hyland, 2019; Matsuda, 2013). Despite the importance of writing, Thai university students often encounter significant challenges, such as difficulties in organizing ideas, limited vocabulary, grammatical inaccuracies, and lack of exposure to authentic writing practices (Sawir, 2005; Rachmajanti, 2008). These challenges highlight the need for innovative instructional strategies tailored to their specific needs.

Over the years, various writing approaches have been developed and implemented to enhance students' writing ability. Notable among these are the Content-Based Instruction (CBI), which emphasizes meaningful content as a foundation for language learning (Brinton, Snow, & Wesche, 2003); the Writing Process Approach (WPA), which focuses on iterative stages of planning, drafting, revising, and editing (Flower & Hayes, 1981); and the Genre-Based Approach (GBA), which equips learners with genre-specific conventions and structures (Hyland, 2007). While these approaches have demonstrated effectiveness individually, the complexity of writing as a skill necessitates a more holistic approach that integrates the strengths of multiple methodologies (Tardy, 2009).

Despite previous research emphasizing the effectiveness of individual writing approaches, little attention has been given to the integration of three approaches—such as CBI, WPA, and GBA—to construct a unified instructional model. An integrated approach would provide a systematic framework for guiding students through the multifaceted process of writing, addressing both linguistic competence and the contextual demands of academic and professional writing.

The objectives of this study are twofold: to investigate the problems faced by Thai university students in English writing skills and to analyze their needs for an instructional model



based on integrated writing approaches. These objectives are essential for understanding the current challenges and identifying the most effective methods to enhance students' writing abilities. By synthesizing elements from three complementary approaches, the instructional model developed in this study aims to enable students to work systematically on their writing tasks, produce more effective written works, and achieve higher levels of proficiency in essay writing.

This research not only seeks to address gaps in existing pedagogical practices but also aims to contribute to the broader field of EFL writing instruction by proposing a practical, needs-driven model. The findings will provide valuable insights into designing writing curricula that foster both linguistic competence and critical thinking, equipping students with the tools to excel in academic and professional contexts.

Research Objectives

- 2.1 To analyze problems on English writing skills of Thai university students.
- 2. 2 To analyze students' need in an instructional model based on integrated writing approach to enhance Thai university students' writing ability.

Research Questions

- 3.1 What are problems on English writing skill of English major students, Faculty of Humanities and Social Sciences, Buriram Rajabhat University?
- 3.2 What are need on development of instructional model based on integrated writing approaches to enhance students' writing skill of the English major students, Faculty of Humanities and Social Sciences, Buriram Rajabhat University?

Literature Review

Problems in Writing

Academic writing is a complex process that involves multiple cognitive and linguistic skills. Scholars have identified several categories of problems that students face in writing, including grammatical and mechanical issues, content inadequacies, vocabulary limitations, sentence structure difficulties, and organizational flaws. These problems hinder the clarity and coherence of written communication, particularly for students writing in a second language.



1. Grammatical and Mechanical Problems

Grammatical and mechanical errors are among the most pervasive issues in student writing. Errors in tense usage, subject-verb agreement, and article application are commonly reported (Ferris, 2011). Mechanical problems, such as incorrect punctuation, capitalization, and spelling, further compromise the readability of texts (Ghabool, Edwina, & Kashef, 2012). These issues often stem from limited exposure to standard grammar and insufficient practice in applying grammatical rules in context.

2. Content Problems

Content inadequacies in writing can manifest as a lack of depth, relevance, or coherence in ideas. Students may struggle to develop and support arguments, often presenting vague or superficial content (Hyland, 2019). Additionally, inadequate understanding of the topic or limited critical thinking skills contribute to poorly articulated ideas (Zamel, 1983). This problem is exacerbated when students are required to write about unfamiliar or abstract topics.

3. Vocabulary Problems

Vocabulary limitations significantly affect students' ability to express their ideas effectively. Research shows that a restricted vocabulary leads to repetitive language use and an over-reliance on simple words, reducing the overall quality of the text (Nation, 2013). For English as a Foreign Language (EFL) learners, the challenge often lies in selecting appropriate words and avoiding incorrect word usage due to limited exposure to academic language (Leki & Carson, 1994).

4. Sentence Structure Problems

Problems with sentence structure are another critical barrier in writing. Run-on sentences, sentence fragments, and improper syntactic arrangements are prevalent among student writers (Flower & Hayes, 1981). These issues often arise from insufficient understanding of complex sentence patterns and the inability to balance sentence variety with clarity. Sentence-level errors disrupt the flow of writing and hinder the reader's comprehension (Myhill & Watson, 2012).

5. Organization Problems

Organizational problems refer to the inability to structure ideas cohesively and logically within a text. Coherence and cohesion are vital for effective communication, yet many students struggle with arranging ideas in a logical sequence and using transitions appropriately (Connor,



1996). Poor paragraph development and a lack of clear thesis statements or topic sentences often characterize disorganized writing (Reid, 1993). This issue can be particularly pronounced in longer essays or research papers where maintaining a consistent structure is essential.

Conclusion

Addressing the challenges of writing requires a comprehensive approach that combines linguistic, cognitive, and pedagogical interventions. By identifying the specific difficulties students face—ranging from grammatical errors to organizational lapses—educators can develop targeted strategies to enhance writing proficiency. Further research and instructional innovation are needed to support students in overcoming these barriers and achieving academic success.

Causes of Problems in Writing

Students' essay writing difficulties stem from various causes, including lack of motivation, insufficient reading, inadequate time, limited practice, insufficient feedback, L1 influence, writer's block, and plagiarism.

1. Lack of Learners' Motivation

Zamel (1997) emphasizes the importance of aligning writing tasks with students' goals, which can boost participation and engagement. Davies (1998) and Leki (1991) highlight the role of interesting and motivating tasks, while Silva (1997) and Thomsan (2003) stress that allowing students to choose their topics enhances writing quality. Pincas (1982) and Byrne (1988) argue that writing becomes more effective when placed in a concrete context.

2. Lack of Reading

Better readers make better writers. Raimes (1998) notes that reading exposes students to vocabulary, idioms, sentence patterns, and organizational flow, which are critical for improving writing skills. Insufficient reading often leads to dissatisfaction with essay writing.

3. Inadequate Time

Hedge (1988) stresses that writing involves multiple stages requiring adequate time for idea generation, organization, drafting, proofreading, and revising. Colions and Gethen (1980) and Kroll (1990) highlight the complexity of organizing writing across various structural levels, emphasizing the impact of time constraints on writing quality.



4. Lack of Practice

Writing, described as an "artistic practice" by Davies (1998), requires consistent effort. Grabe and Kaplan (1996) argue that regular practice is essential for mastering the skill, akin to learning any other expertise through repeated effort.

5. Teachers' Feedback

Effective feedback involves teachers acting as informed readers rather than evaluators (Zamel, 1985; Byrne, 1988). Recognizing students' achievements rather than focusing solely on errors encourages constructive revisions.

6. Influence of L1 into TL

Blanchard and Root (2004) discuss how the influence of a student's first language (L1) can impede English writing. Unawareness of English writing conventions often leads students to adopt L1 structures, which hinders effective essay composition.

7. Students' Readiness

Readiness, including physical and mental preparedness, significantly impacts writing performance (Foster, 2015; Winarso, 2016). Lack of readiness hinders students' ability to engage with writing tasks effectively.

8. Writer's Block

Thao (2018) defines writer's block as a creative slowdown caused by internal or external factors such as personal issues or distractions, which can severely affect students' ability to write.

9. Plagiarism

Thao (2018) also identifies plagiarism as a major issue, often resulting from students' reliance on online resources and lack of confidence in their abilities. This dependence discourages originality and critical thinking.

Research on the causes of writing difficulties provides a framework for analyzing students' challenges in essay writing. This study applies this framework to examine the problems faced by students in an Essay Writing course.



The Concept of Need Analysis in Language Instruction

Need analysis is a systematic process of identifying and assessing learners' specific needs, goals, and challenges to develop effective instructional programs (Hutchinson & Waters, 1987). It provides a foundation for designing tailored language courses by ensuring alignment with learners' requirements, learning contexts, and desired outcomes. In writing instruction, need analysis helps identify students' proficiency levels, common challenges, and preferences for learning strategies, thereby informing the development of a comprehensive instructional model (Richards, 2001). Long (2005) emphasizes that need analysis is a dynamic and iterative process that involves various stakeholders, including learners, teachers, and administrators. This comprehensive approach ensures that the instructional design addresses not only linguistic needs but also cognitive and motivational factors.

The Importance of Need Analysis in Writing Instruction

Writing is a multifaceted skill requiring proficiency in grammar, vocabulary, organization, and coherence. For Thai EFL learners, these elements are often compounded by cultural and educational factors, making need analysis a crucial step in designing effective instructional interventions. Needs analysis is a critical component in developing effective teaching models, as it provides a systematic understanding of the learners' needs, preferences, and contextual factors that influence their learning. According to Dick and Carey (2015), a thorough needs analysis helps to identify the gap between the current performance and the desired outcomes, ensuring that instructional goals and objectives are directly aligned with learners' requirements. This process enables instructional designers to create tailored content, select appropriate strategies, and design meaningful assessments that meet the specific needs of the target audience. According to West (1994), the lack of alignment between instructional materials and learners' actual needs often results in poor engagement and limited progress. Conducting a need analysis allows educators to identify specific gaps in students' writing abilities and tailor instructional content accordingly. For example, need analysis can reveal whether students struggle more with grammatical accuracy, text organization, or genre-specific conventions, thereby guiding the development of targeted teaching strategies (Hyland, 2007).



Frameworks for Conducting Need Analysis

Several frameworks for need analysis have been proposed in language education. Brown (1995) outlines a process that includes gathering information through surveys, interviews, observations, and diagnostic tests to identify learners' linguistic and pedagogical needs. Similarly, Dudley-Evans and St John (1998) propose a three-level framework encompassing target situation analysis (identifying learners' goals), learning situation analysis (examining classroom dynamics), and present situation analysis (assessing current proficiency levels).

For writing instruction, these frameworks help pinpoint the specific challenges students face at different stages of the writing process. For instance, in the Thai EFL context, Siriwan (2007) highlights the importance of understanding how students' first language influences their English writing and the role of classroom practices in shaping their writing skills.

Research Methodology

5.1 Population

The population of this phase will be the students majoring in English in the first semester of the academic year 2024 at the Faculty of Humanities and Social Sciences, Buriram Rajabhat University.

5.2 Samples

The samples of this phase will be 68 third-year students majoring in English, Faculty of Humanities and Social Sciences, Buriram Rajabhat University. They have enrolled on Essay Writing course (2032103) and will be selected by using purposive sampling.

5.3 Research Instruments

5.3.1 An open-ended questionnaire regarding problems in writing and needs on instructional model based on integrated writing approaches to enhance students' writing skill, with three parts:

Part 1 - General information data is about general information including gender, age, class, and grade point average.

Part 2 - Questions regarding writing problem in writing in essay writing and needs on instructional model. The researchers drafted the questionnaire using the rating scale from



Likert's 5 levels determined by scoring in each question: 5 means most; 4 means much; 3 means moderate; 2 means less; 1 means least.

Part 3 - Suggestions and Opinions.

- 5.3.2 A semi-structured interview regarding problems in writing and needs on instructional model based on integrated writing approaches to enhance students' writing skill with three parts:
- Part 1 General information data is about basic information including gender, age, class, and grade point average.
- Part 2 Questions regarding writing problems in essay writing and needs on instructional model.
 - Part 3 Suggestions and Opinions.

5.4 Data Collection

- 5.4.1 Quantitative Data: The collection of quantitative data on problems in writing and needs on instructional model based on integrated writing approach is carried out by the researcher. The samples, English major students will be requested to fill out the open-ended questionnaire. The duration of this phase is in the first semester academic year 2024 at the Faculty of Humanities and Social Sciences, Buriram Rajabhat University.
- 5.4.2 Qualitative Data: After the samples fill out the questionnaire, the researcher performs the collection of qualitative data on problems in writing and needs on instructional model based on integrated writing approach. The duration of this phase will be in the first semester academic year 2024 at the Faculty of Humanities and Social Sciences, Buriram Rajabhat University. The semi-structured interview is conducted with the samples. Each interviewee is interviewed for approximately fifteen minutes about the problems in writing and needs on instructional model based on integrated writing approach. The researcher employed the note-taking technique and recording the interview for data collection and transcribed afterwards.

5.5 Data Analysis

- 5.5.1 Quantitative Data
- 5.5.1.1 The samples' general information status of gender, age, and enrooled writing courses were analyzed by the frequency and percentage.



- 5.5.1.2 The data about obtained from the questionnaire of surveying the problems on essay writing was analyzed by mean (\bar{x}) and standard deviation (S.D.).
- 5.5.1.3 The data about obtained from the questionnaire of identification of needs on instructional model based on integrated writing approach will be analyzed by mean (\bar{x}) and standard deviation (S.D.), frequency and percentage.

5.5.2 Qualitative Data

- 5.5.2. 1 The data obtained from the semi-structured interview regarding the problems on essay writing will be reviewed and analyzed by using content analysis.
- 5.2.2. 2 The data obtained from the semi-structured interview regarding the identification of needs on instructional model based on integrated writing approach will be reviewed and analyzed by using content analysis.

Research Results

6.1 General Information of the Respondents

Table 6.1

General Information of the Respondents

No.	Information	Frequency	Percentage
1	Gender		
1.1)	Male	8	11.76
1.2)	Female	60	88.24
		68	100.00
2	Group		
2.1)	Group 1	34	50.00
2.2)	Group 2	34	50.00
		68	100.00
3	Age		
3.1)	19-20	20	29.41



No.	Information	Frequency	Percentage
3.2)	21-22	48	70.59
		68	100.00
4	Year		
4.1)	3 years	68	100.00
		68	100.00
5	The Writing Courses Enrolled		
5.1)	Basic Writing	68	100.00
5.2)	Paragraph Writing	68	100.00
5.3)	Essay Writing	68	100.00
		68	100.00
	Grand total	68	100.00

The demographic information and course enrollment data of the participants are summarized as follows:

The sample consisted of 68 participants, with 11.76% (n=8) identified as male and 88.24% (n=60) identified as female.

The participants were evenly distributed across two groups, Group 1 and Group 2, with each group comprising 50.00% (n=34) of the sample.

Regarding age distribution, 29.41% (n=20) of participants were aged 19–20 years, while the majority, 70.59% (n=48), were aged 21–22 years.

All participants (n=68, 100.00%) were in their third year of study.

In terms of course enrollment, all participants had completed three writing courses: Basic Writing, Paragraph Writing, and Essay Writing, each with 100.00% (n=68) participation.

This dataset provides a comprehensive overview of the participants' demographics and educational background relevant to the study.

6.2 Problems in Writing Essays in Essay Writing Course faced by the Third Year English Major Students, English Program, Faculty of Humanities and Social Sciences, Buriram Rajabhat University



Table 6.2

Overview of Problems in Essay Writing in Essay Writing Course faced by the Third Year English

Major Students, English Program, Faculty of Humanities and Social Sciences, Buriram Rajabhat

University

NT-	g	7	Total $(n = 68)$			
No.	Statements	\bar{x}	S.D.	Meaning	Rank	
1	Grammatical and Mechanical Problems	3.16	1.069	moderate	5	
2	Content Problem	3.48	0.911	moderate	3	
3	Vocabulary Problem	3.70	0.938	High	1	
4	Sentence Structure Problems	3.56	0.917	High	2	
5	Organization Problem	3.47	0.924	moderate	4	
	Average	3.47	0.952	moderate		

From the data, the results showed that the students had problems in essay writing at an overall "moderate" level ($\bar{x}=3.47$, S.D. = 0.952). When considering specific aspects, it was found that the highest problem encountered by the students was vocabulary problems ($\bar{x}=3.70$, S.D. = 0.938), followed by sentence structure problems ($\bar{x}=3.56$, S.D. = 0.917) and content problems ($\bar{x}=3.48$, S.D. = 0.911), respectively. The organization problem was ranked fourth ($\bar{x}=3.47$, S.D. = 0.924), while grammatical and mechanical problems were ranked fifth ($\bar{x}=3.16$, S.D. = 1.069).

6.3 Causes of the Writing Problems in Essay Writing Course



Table 6.3

Overview of Causes of the Writing Problems in Essay Writing Course faced by the Third Year

Students Group 1 and 2, English Program, Faculty of Humanities and Social Sciences, Buriram

Rajabhat University

Τ.	Statements of Causes of Problems		Total (58)	David	
Item	in Essay Writing	\bar{x}	S.D.	Meaning	Rank	
1	Lack Learners' Motivation	3.73	0.971	High	5	
2	Inadequate Time	3.89	0.920	High	1	
3	Lack of Practice	3.61	1.046	High	7	
4	Teacher's Feedback	3.62	1.038	High	6	
5	Lack of Reading	3.54	1.019	High	9	
6	Influence of L1 (Thai) into TL (English)	3.55	1.019	High	8	
7	Students' Readiness	3.74	0.940	High	4	
8	Writer's Block	3.82	0.867	High	2	
9	Plagiarism	3.81	0.946	High	3	

From the data, the results showed that the highest causes of essay writing problems encountered by students were inadequate time ($\bar{x}=3.89$, S.D. = 0.920), followed by writer's block ($\bar{x}=3.82$, S.D. = 0.867) and plagiarism ($\bar{x}=3.81$, S.D. = 0.946), respectively. Students' readiness was ranked fourth ($\bar{x}=3.74$, S.D. = 0.940), while lack of learners' motivation was ranked fifth ($\bar{x}=3.73$, S.D. = 0.971). Other notable causes included teacher's feedback ($\bar{x}=3.62$, S.D. = 1.038), lack of practice ($\bar{x}=3.61$, S.D. = 1.046), influence of L1 (Thai) into TL (English) ($\bar{x}=3.55$, S.D. = 1.019), and lack of reading ($\bar{x}=3.54$, S.D. = 1.019), which was ranked ninth. All causes were rated at a "high" level of significance.

6.4 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability



Table 6.4

Overview of Needs on Developing an Instructional Model based on Integrated Writing

Approaches to Enhance Thai University Students' Writing Ability

.	Statements		Total (68)			
Item			S.D.	Meaning	Rank	
1	Grammar and Mechanics: Needs on the	4.03	0.888	High	2	
	Instructional Model to Enhance English Writing					
	Ability in terms of Grammar and Mechanics in					
	Writing					
2	Content: Needs on the Instructional Model to	3.91	0.975	High	5	
	Enhance English Writing Ability in terms of					
	Developing Content in Writing					
3	Vocabulary: Needs on the Instructional Model to	4.05	0.892	High	1	
	Enhance English Writing Ability in terms of					
	Vocabulary in Writing					
4	Sentence Structure: Needs on the Instructional	3.97	0.932	High	3	
	Model to Enhance English Writing Ability in terms					
	of Sentence Structure in Writing					
5	Organization: Needs on the Instructional Model to	3.95	0.966	High	4	
	Enhance English Writing Ability in terms of					
	Organization in Writing					
	Average	3.98	0.930	High	_	

From the data, the results showed that the overall needs on the instructional model to enhance English writing ability were rated at a "high" level ($\bar{x} = 3.98$, S.D. = 0.930). Among the specific aspects, the highest need was for enhancing vocabulary in writing ($\bar{x} = 4.05$, S.D. = 0.892), followed by grammar and mechanics ($\bar{x} = 4.03$, S.D. = 0.888) and sentence structure ($\bar{x} = 3.97$, S.D. = 0.932). The need for improving organization in writing was ranked fourth ($\bar{x} = 3.95$, S.D. = 0.966), while the development of content in writing was ranked fifth ($\bar{x} = 3.91$, S.D. =



0.975). All aspects were rated consistently high, indicating significant demand for instructional support in areas.

6.5 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability in term of Writing Approaches

Table 6.5

Overview of Needs on Developing an Instructional Model based on Integrated Writing

Approaches to Enhance Thai University Students' Writing Ability

T.			Total (68)			
Item	Statements	\overline{x}	S.D.	Meaning		
1	An integrated writing approach should improve	3.96	0.938	High		
	writing ability using the features of content-					
	based approach.					
2	The integrated writing approach should improve	4.00	0.934	High		
	writing ability using the features of the process					
	writing approach.					
3	An integrated writing approach should improve	4.01	0.846	High		
	the writing ability using the features of genre-					
	based approach.					
	Average	3.99	0.906	High		

From the data, the results indicated that the overall need for an integrated writing approach to improve writing ability was rated at a "high" level ($\bar{x} = 3.99$, S.D. = 0.906). When considering specific aspects, the highest-rated need was for the integrated writing approach to improve writing ability using the features of the genre-based approach ($\bar{x} = 4.01$, S.D. = 0.846). This was followed closely by the process writing approach ($\bar{x} = 4.00$, S.D. = 0.934) and the content-based approach ($\bar{x} = 3.96$, S.D. = 0.938). These results highlight a significant demand for integrating these approaches to enhance writing ability.



6.6 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability in term of Types of Essays

Table 6.6

Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance
Thai University Students' Writing Ability in term of Types of Essays

			Total (68)			
No.	Types of Essays	F	%	Rank		
1	Descriptive	51	75.00	3		
3	Comparison and Contrast	53	77.94	2		
4	Cause and Effect	54	79.41	1		
2	Narrative	46	67.65	4		
5	Persuasive	34	50.00	5		
9	Research	19	27.94	6		
6	Process	9	13.24	7		
7	Classification	3	4.41	8		
8	Critical	6	8.82	9		
10	Argumentative	6	8.82	9		
11	Definition	6	8.82	9		

The data revealed the needs for developing an instructional model based on integrated writing approaches to enhance Thai university students' writing ability in terms of types of essays. The most needed type was cause and effect essays, with 79.41% (n = 54), ranked first. This was followed by comparison and contrast essays at 77.94% (n = 53), ranked second, and descriptive essays at 75.00% (n = 51), ranked third. Narrative essays ranked fourth with 67.65% (n = 46), while persuasive essays ranked fifth with 50.00% (n = 34).

6.7 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability in term of Essay Writing Topics



Table 6.7

Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance

Thai University Students' Writing Ability in term of Essay Writing Topics

NT.	The state of	Total (68)				
No.	Topics	F	%	Rank		
1	society and culture	33	48.53	3		
2	technology	29	42.65	5		
3	environment	15	22.06	9		
4	food	41	60.29	1		
5	art	20	29.41	7		
6	music	31	45.59	4		
7	movie	19	27.94	8		
8	sport	9	13.24	10		
9	education	22	32.35	6		
10	social media	36	52.94	2		
11	economic	8	11.76	10		
12	politic	4	5.88			
13	tourism	3	4.41			
14	business	4	5.88			
15	history	11	16.18	9		

The data revealed the needs for developing an instructional model based on integrated writing approaches to enhance Thai university students' writing ability in terms of essay writing topics. The most needed topic was **food**, ranked first, with 60.29% (n = 41), followed by **social media** at 52.94% (n = 36), ranked second, and **society and culture** at 48.53% (n = 33), ranked third. **Music** was ranked fourth at 45.59% (n = 31), and **technology** ranked fifth at 42.65% (n = 29).

6.8 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability in term of Mode of Teaching



Table 6.8

Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance
Thai University Students' Writing Ability in term of Mode of Teaching

	M 1 Cm 1:	Total (68))
No.	Mode of Teaching	F %	Rank	
1	Onsite teaching (in-class learning)	43	63.24	1
2	Blended learning (online and onsite)	31	45.59	2
3	Online teaching	21	30.88	3
4	Video-based instruction	7	10.29	6
5	Learning using textbooks and printed materials	16	23.53	4
6	Learning through various applications	13	19.12	5

The data revealed the needs for developing an instructional model based on integrated writing approaches to enhance Thai university students' writing ability in terms of the mode of teaching. The most preferred mode was **onsite teaching (in-class learning)**, which ranked first with 63.24% (n = 43). This was followed by **blended learning (online and onsite)** at 45.59% (n = 31), ranked second, and **online teaching** at 30.88% (n = 21), ranked third.

6.9 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability in term of Teaching Method

Table 6.9

Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance

Thai University Students' Writing Ability in term of Teaching Method

No.	Teaching Method		Total (68)			
	reaching Method	F	%	Rank		
1	Lecture-based teaching	31	45.59	2		
2	Self-study method	25	36.76	3		
3	Group activities	42	61.76	1		
4	Case study	18	26.47	5		



	m 1: 3/4 1	Total (68)			
No.	Teaching Method	F	%	Rank	
5	Illustration	13	19.12	6	
6	Workshop	16	23.53	4	
7	Collaborative writing	6	8.82	8	
8	Group discussion	12	17.65	7	
9	project method	1	1.47	9	

The data revealed the needs for developing an instructional model based on integrated writing approaches to enhance Thai university students' writing ability in terms of teaching methods. The most preferred method was **group activities**, ranked first with 61.76% (n = 42). This was followed by **lecture-based teaching**, which ranked second at 45.59% (n = 31), and **self-study method**, ranked third at 36.76% (n = 25).

6.10 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability in term of Teaching Duration

Table 6.10

Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance
Thai University Students' Writing Ability in term of Teaching Duration

No.	D (1)		Total (68)		
		Duration	F	%	Rank
1	2 hours		37	54.41	1
2	2.30 hours		12	17.65	2
3	3 hours		12	17.65	2
4	3.30 hours		2	2.94	4
5	4 hours		3	4.41	3



The data revealed the needs for developing an instructional model based on integrated writing approaches to enhance Thai university students' writing ability in terms of teaching duration. The most preferred duration was **2 hours**, ranked first with 54.41% (n = 37). This was followed by **2.30 hours** and **3 hours**, both receiving equal preference and ranking second with 17.65% each (n = 12).

6.11 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability in term of Language Used in Teaching Essay Writing

Table 6.11

Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance

Thai University Students' Writing Ability in term of Language Used in Teaching Essay Writing

No.	Statement	Total (68)		
		F	%	Rank
1	Instruction primarily in English with some Thai translation	44	64.71	1
2	Instruction entirely in Thai	5	7.35	4
3	Instruction entirely in English	10	14.71	2
4	Instruction primarily in Thai with some English usage	9	13.24	3

The data revealed the needs for developing an instructional model based on integrated writing approaches to enhance Thai university students' writing ability in terms of the language used in teaching essay writing. The most preferred language option was **instruction primarily in English with some Thai translation,** ranked first with 64.71% (n = 44). This was followed by **instruction entirely in English,** ranked second at 14.71% (n = 10), and **instruction primarily in Thai** with some English usage, ranked third at 13.24% (n = 9). The least preferred language option was **instruction entirely in Thai**, ranked fourth at 7.35% (n = 5).

6.12 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability in term of Types in Content-based Instruction



Table 6.12

Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance

Thai University Students' Writing Ability in term of Types in Content-based Instruction

No.	СВІ Туре	Total (68)			
		F	%	Rank	
1	Theme-Based Instruction	28	41.18	2	
2	Sheltered Content Instruction	9	13.24	3	
3	Adjunct Language Instruction	31	45.59	1	

The data revealed the needs for developing an instructional model based on integrated writing approaches to enhance Thai university students' writing ability in terms of types of content-based instruction (CBI). The most preferred CBI type was **adjunct language instruction**, ranked first with 45.59% (n = 31). This was followed by **theme-based instruction**, ranked second at 41.18% (n = 28), and **sheltered content instruction**, ranked third at 13.24% (n = 9).

6.13 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability in term of Steps in the Genrebased Approach

Table 6.13

Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance

Thai University Students' Writing Ability in term of Steps in the Genre-based Approach

NT.	GBA Steps	Total (68)			
No.		F	%	Rank	
1	Building Context	21.00	30.88	5	
2	Modelling and Deconstructing Text	32.00	47.06	2	
3	Joint Construction of Texts	37.00	54.41	1	
4	Independent Construction	30.00	44.12	3	
5	Linking Related Texts	22.00	32.35	4	



The data revealed the needs for developing an instructional model based on integrated writing approaches to enhance Thai university students' writing ability in terms of steps in the genre-based approach (GBA). The most preferred step was **joint construction of texts,** ranked first with 54.41% (n = 37). This was followed by **modeling and deconstructing text,** ranked second at 47.06% (n = 32), and **independent construction**, ranked third at 44.12% (n = 30). Other steps included **linking related texts**, ranked fourth at 32.35% (n = 22), and **building context,** ranked fifth at 30.88% (n = 21).

6.14 Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance Thai University Students' Writing Ability in term of Steps in the Writing Process Approach

Table 6.14

Needs on Developing an Instructional Model based on Integrated Writing Approaches to Enhance

Thai University Students' Writing Ability in term of Steps in the Writing Process Approach

NT.	PWA Steps		Total (68)			
No.		F	%	Rank		
1	Prewriting and Planning	46.00	67.65	1		
2	Drafting	45.00	66.18	2		
3	Responding	46.00	67.65	1		
4	Revising and editing	38.00	55.88	3		
5	Evaluating and post-writing	35.00	51.47	4		

The data indicated the needs for developing an instructional model based on integrated writing approaches to enhance Thai university students' writing ability in terms of steps in the writing process approach. The most preferred steps were **prewriting and planning** and **responding**, both ranked first with 67.65% (n = 46). These were followed closely by **drafting**, ranked second at 66.18% (n = 45). Other steps included **revising and editing**, ranked third at 55.88% (n = 38), and **evaluating and post-writing**, ranked fourth at 51.47% (n = 35).



Discussion

The findings of this study highlight several significant insights into the challenges faced by Thai university students in essay writing and their needs for an instructional model that integrates various writing approaches to enhance their writing ability.

Firstly, the students in this study reported moderate overall difficulties in essay writing, with vocabulary problems emerging as the most prominent challenge. This finding is consistent with existing research that highlights the importance of vocabulary in academic writing, as a limited vocabulary can significantly hinder students' ability to express ideas clearly and accurately (Schmitt, 2000). Sentence structure issues and content-related problems followed closely, reflecting common writing difficulties among second-language learners. These findings suggest that students may struggle to construct grammatically correct and coherent sentences, which can affect the overall quality and clarity of their essays (Hinkel, 2004).

The results further revealed that the primary causes of writing difficulties included inadequate time, writer's block, and plagiarism. Time constraints are a well-documented challenge for students, especially those balancing academic work with other responsibilities (Grabe & Kaplan, 1996). Writer's block, identified as a common issue among writers, may be particularly pronounced in the context of academic writing, where students often face pressure to produce high-quality work under tight deadlines. Additionally, plagiarism, which has been a persistent issue in academic settings (Pennycook, 1996), could reflect a lack of understanding regarding academic integrity or an attempt to cope with time constraints.

In terms of the instructional model, the students expressed a strong need for an approach that would address their writing challenges, with the highest demand for vocabulary enhancement, followed by grammar and sentence structure. This underscores the necessity for focused interventions in these areas, which are fundamental for developing writing proficiency (Richards & Renandya, 2002). The students' desire for an integrated writing approach further suggests that a singular approach may not be sufficient to address their diverse needs. The integration of the genre-based, process-based, and content-based approaches was rated highly, indicating that students value the flexibility and comprehensiveness that these approaches offer in fostering their writing skills.



The genre-based approach, which emphasizes the conventions and structures of different types of writing, was rated as the most important in improving writing ability. This finding aligns with the idea that students benefit from explicit instruction in the genre-specific features of academic writing (Hyland, 2007). The process writing approach, which focuses on the stages of writing (planning, drafting, revising), was also highly valued, reflecting students' recognition of the importance of writing as a recursive and dynamic process rather than a one-time activity (Flower & Hayes, 1981). Similarly, the content-based approach, which integrates language learning with subject matter content, was seen as crucial for developing both writing and critical thinking skills in academic contexts (Brinton, 2003).

The students' high ratings of the need for an integrated approach suggest that no single writing strategy or model is sufficient on its own. Instead, a more holistic and flexible approach that combines elements from different writing theories and practices is necessary to address the multifaceted challenges students face in academic writing. The integrated model could provide students with the tools and strategies needed to improve their vocabulary, grammar, sentence structure, and overall writing fluency.

In conclusion, the findings of this study indicate that Thai university students face a range of challenges in essay writing, with vocabulary, sentence structure, and content being the most significant issues. The need for an instructional model that incorporates multiple writing approaches, particularly the genre-based, process-based, and content-based approaches, is evident. Future instructional models should consider these findings and design interventions that address the specific needs of students while fostering a more comprehensive and effective approach to academic writing.

Conclusion

This study investigated the challenges faced by Thai university students in essay writing and their needs for an instructional model to enhance their writing ability. The findings revealed that students encountered moderate difficulties in vocabulary, sentence structure, and content, with time constraints, writer's block, and plagiarism identified as the main causes of these challenges. The students expressed a high need for an instructional model that integrates various writing approaches, with a particular preference for the genre-based, process-based, and content-based



approaches. These results emphasize the importance of an integrated, flexible approach to writing instruction that can address students' diverse needs and improve their overall writing proficiency. Future instructional models should incorporate these findings to create more effective and targeted interventions for enhancing academic writing skills.

Recommendations

9.1 Development of an Integrated Instructional Model

Based on the students' needs and challenges identified in this study, it is recommended that an instructional model integrating the genre-based, process-based, and content-based approaches be developed. This model should focus on enhancing vocabulary, grammar, sentence structure, and writing fluency, providing students with a comprehensive framework to improve their writing ability. Tailoring the model to address specific challenges such as time management and writer's block will further support students in overcoming common barriers to effective essay writing.

9.2 Incorporation of Timely Writing Practice and Feedback

To address the issue of inadequate time, it is recommended that the instructional model incorporate more frequent writing practice with timely and constructive feedback. Structured opportunities for revision and iterative writing processes, alongside focused instruction on time management strategies, can help students build their writing skills while managing deadlines more effectively. Encouraging peer reviews and collaborative writing activities may also foster a supportive learning environment.

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The Factors for Developing the Competency of Creative Media Instructors at Universities in Hubei Province in Digital Transformation Era

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Abstract

This research utilized both qualitative and quantitative methodologies to investigate and develop the factors for developing the competency of creative media instructors at universities in Hubei province in digital transformation era. The factors and indicators were derived through a comprehensive review of literature and previous studies. Their validity and appropriateness were examined by expert evaluations conducted via focus group discussions with nine experts from best-practice universities, including Wuhan University, Wuhan University of Technology, and Hubei University. The data obtained from the interviews were analyzed using the content analysis method. Furthermore, an evaluation system, which consists of five factors and 19 indicators, was established. These factors include teaching ability, scientific research capacity, technology application ability, administrative capacity, and ability to build relationships.

Keyword: Digital Transformation Era, Creative Media Instructors, Competency, Factors

Introduction

Guo,L.Y. (2024) research highlights several challenges related to teaching competencies within media programs at universities. Specifically, in terms of curriculum design, the study points out that some media programs lack a scientifically grounded curriculum structure, with



insufficient content depth, a disconnection between theory and practice, and an imperfect curriculum system. These negatively impact the quality of talent development. To address these issues, it is necessary to optimize the setting, expand general courses to align with industry demands, strengthen new media courses, and improve students' overall knowledge and professional skills. In terms of practical teaching organization, teachers should organize students to participate in practice through internal school platforms and school-enterprise cooperation. This approach helps students bridge the gap between theory and practice, improves their comprehensive practical ability, and better prepares them for the demands of media-related professions. For example, control the practical activities of platforms such as the school radio and introduce enterprise resources to optimize practical teaching.

In terms of scientific research ability, college media majors need to conduct research on media disciplines and industries. Teaching content should be aligned with industry trends, and training objectives should be designed in response to evolving industry needs. Additionally, using enterprise resources can help make up for the differences between teaching and job positions, improving the alignment between talent cultivation and industry demands. This approach highlights the key role of scientific research in supporting teaching and talent cultivation.

Regarding technical application ability, media talents need to gain proficiency in new media technologies to drive innovation in traditional media. Colleges should set up new media courses to improve students' technical application levels, enable them to adapt to the technological innovation of the media industry, and enhance their professional abilities by taking advantage of new media.

In the ability to build relationships, the ability to establish school-enterprise cooperation relationships is mentioned: colleges can assign faculty members to media enterprises to improve their practical abilities and invite industry practitioners to deliver lectures. Furthermore, institutions can build an internal practice platform and cooperate with enterprises to integrate industry resources to optimize teaching and research, which strengthen students' practical qualities and improve the quality of talent cultivation. Regarding the teacher-student relationship building ability, teachers are the primary facilitators of education. Their teaching proficiency, professional expertise, and moral qualities affect students' growth and the quality of talents. To promote the



cultivation of media talents, educators should improve their own qualities and build good teacher-student relationships. (Guo,L.Y. 2024: 88-90)

Liu,Y. (2024) indicate several critical aspects of teaching ability in media art undergraduate programs. For the knowledge update and teaching content adaptation ability, the knowledge structure of teachers in media art undergraduate colleges lags behind. To address this issue, teachers need to continuously update professional knowledge to align teaching content with industry developments and impart cutting-edge knowledge and skills to students; otherwise, it is difficult to meet industry needs. For the theory-practice integration teaching ability, Liu emphasized the importance of practical teaching for media art majors. However, teachers often disconnect theory from practice. They should enhance the ability to combine theoretical knowledge and practical skills, innovate teaching methods and means, and use abundant resources to provide students with diverse practical experiences. Finally, Liu addressed the need for interdisciplinary teaching ability. The diversification and cross-border integration of the industry require teachers to possess strong interdisciplinary knowledge and abilities. They need to strengthen interdisciplinary learning and communication, participate in interdisciplinary teams and activities, and integrate multidisciplinary knowledge into teaching to improve comprehensive innovation abilities.

In terms of scientific research ability, the media art field is developing innovatively for scientific research innovation and achievement output ability. However, teachers often exhibit weak capabilities in scientific research innovation, with limited research on new technologies and new media leading to few achievements. To solve this, they need to explore cutting-edge topics deeply, innovate theoretical methods, and increase achievement output. For the scientific research project operation ability, teachers lack experience in scientific research project declaration and management and have difficulties in topic selection and project establishment. Additionally, team building is weak with little cooperation and communication. They should actively apply for and undertake projects, strengthen enterprise cooperation and team collaboration to improve scientific research abilities. For the scientific research resource acquisition and utilization ability, scientific research relies heavily on adequate resource support. Limited funds in colleges lead to resource shortages for teachers, which negatively affects the quality of achievements. Teachers should



work to expand channels to acquire and utilize resources to ensure the progress of scientific research.

In terms of technical application ability, media art majors have a wide range of practical fields and rapid technology updates. Teachers should keep up with the technological innovation of the industry, master practical technologies such as film and television production and graphic design, and integrate them into teaching to improve students' technical application abilities.

In terms of relationship-building ability, two critical aspects require attention. First, for the industry-university-research cooperation relationship-building ability, teachers should actively deepen industry-university-research cooperation. This involves jointly building platform mechanisms with enterprises and institutions, strengthening communication and interaction, promoting the transformation of scientific research achievements, and improving the evaluation and incentive system to enhance practical teaching and scientific research levels. Second, for the international exchange and cooperation relationship-building ability, educators should participate in international exchanges and cooperation by attending academic conferences, applying for exchange and visit programs, carrying out cooperative research courses, and building and operating platforms. These efforts help to broaden international perspectives, enhance academic influence, and promote the internationalization of education. (Liu Yi. 2024: 202 - 204)

Yao,D. (2021) emphasized that the teaching content of teacher self-built online courses should meet the needs of learners, enhance their abilities and expand their knowledge. Courses should cover abundant learning resources, clear course introductions, high-quality teaching teams and effective teaching designs. For example, designing content with inspiration and interest and enriching the forms of homework can achieve good teaching results. Learning interaction is crucial for online courses. Teachers should master students' learning situations through teacher-student, student-student and human-computer interactions to assist in teaching. For instance, realizing teacher-student interaction by adopting various forms such as asking questions, organizing students to complete tasks in teams to achieve student-student interaction, and guiding students to improve by using the platform system evaluation to realize human-computer interaction. The learning platform is the key to online courses. Its page design should be scientific and reasonable with good visual effects. The platform functions should have compatibility, stability and effectiveness, and be able to record learning trajectories, send notifications and



reminders, and provide learning situation analysis to ensure the smooth progress of online learning. Furthermore, teachers need to be proficient in operating teaching tools such as remote online learning platforms and use technical means to improve teaching quality. For example, using platform functions in teaching to carry out various teaching activities and conduct effective teaching management. (Yao,D. 2021: 61 - 64)

Wang, Y. & Gao, C.Q. (2021) proposed that the positioning and structure of the media discipline should be rethought. The traditional professional curriculum system should be broken, new technological knowledge should be integrated, and the faculty structure should be optimized by integrating multi-disciplinary faculty. These measures aim to meet the talent needs of the new media business format and promote the transformation of teaching from traditional to adapting to the intelligent media era. Teachers should adhere to humanistic ideals and not get lost in technological changes. Based on the human-centered concept, they should cultivate students' new ideals, ethics, thinking and other qualities. With solid disciplinary knowledge and insights into the times, they should lead students to understand society, avoid the teaching being adrift, and stabilize the foundation of education. To achieve these goals, teachers need to update their knowledge systems, break internal disciplinary barriers, promote disciplinary integration, and carry out collaborative education. Through projects, the teaching process should be integrated, practical goals should be incorporated, an interdisciplinary knowledge system should be built to improve their own qualities, and school-media and school-enterprise cooperation should be utilized to optimize teaching content and methods and enhance students' adaptability in the industry.

In the transformation of media education, teachers should improve their mastery and application abilities of new media technologies, new content production processes, etc. They should follow the forefront and update their knowledge systems to adapt to the integrated media and intelligent media business formats. By integrating technological elements into teaching and constructing career forward-looking cognition for students, the technical qualities of students can be improved. Journalism and communication teachers should break disciplinary boundaries and cooperate with teachers from multiple disciplines such as data science and sociology to establish a "teacher-teacher" growth community. They should also share knowledge and experience and conduct teaching and scientific research collaboratively. Such efforts enhance the depth of



disciplinary integration and the quality of talent cultivation. Additionally, exploring school-media and school-enterprise cooperation is essential for creating a collaborative education model. By learning from the cutting-edge dynamic experience of the industry, introducing practical resources to optimize teaching, and providing suitable talents and intellectual support for the industry at the same time. This synergy promotes the coordinated development of education and the media industry can be promoted. (Wang,Y. & Gao,C.Q. 2021: 60 - 62)

Wang, Z.Z. (2023) pointed out that some higher vocational teachers employ outdated teaching concepts and methods, failing to tailor instruction to students' individual aptitudes. To address this, educators need to keep pace with the times. They should attach great importance to training and integrate training into teaching, establish the concept of equal emphasis on teaching and training, adopt diversified methods according to student characteristics to stimulate students' initiative, and increase the proportion and quality of practical teaching. Teachers also need to update teaching content based on enterprise practice. For example, teachers of fashion media majors should integrate the latest photography and digital needs of enterprises into teaching according to industry trends to ensure the timeliness of knowledge and enhance students' workplace adaptability. In the area of scientific research, higher vocational teachers often face challenges due to homogeneous faculty backgrounds and the lack of doctoral-level educators lead to a shortage of scientific research achievements. Taking advantage of the "1 + X" opportunity, teachers should participate in enterprise projects and school-enterprise joint research and development to improve their scientific research levels, provide theoretical support for teaching, and solve technical problems for enterprises. Furthermore, the technical application ability of higher vocational teachers is weak. For example, most teachers of fashion media majors are insufficient in applying software such as AE and 3DStyle. Teachers should participate in technical training and obtain skill certificates to improve their technical levels, skillfully use industry software for teaching, and help students master practical skills. Strengthening partnerships between schools and enterprises is another vital strategy. Enterprises should build internship bases for schools and send experts for guidance. School-enterprise two-way part-time jobs, talent introduction and cultivation optimize the teaching staff and jointly promote the integration of production and education. Schools should cultivate seed and backbone teachers to play a leading role. Participating in training competitions and sharing experiences among teachers can further



promote teamwork and progress and improve the overall teaching and practical abilities. (Wang, Z.Z. 2023: 121 - 123)

Therefore, the researcher is interested in studying the factors for developing the competency of creative media instructors at universities in Hubei province in digital transformation Era to facilitating the enhancement of their capabilities. The findings are expected to have a direct impact on improving the abilities of creative media lecturers in universities. Given the limitation of traditional improvement methods in addressing the demands of new developments, there is an urgent need to reformulate strategies for ability development. Adequate information is inevitably necessary for ability development strategies. Thus, the results of the current research will promptly and accurately disclose relevant factors, providing an efficient foundation for developing strategies to further standardize the ability development of creative media lecturers in colleges and universities in the future.

Objectives

The objective of this research is to investigate and develop the factors for developing the competency of creative media instructors at universities in Hubei province in digital transformation era.

Research Methodology

1. Target group

In this study, the researchers selected three universities that have been regarded as bestpractice institutions for the competency of creative media instructors: Wuhan University, Wuhan University of Technology, and Hubei University. The selection was based on the following reasons:

Wuhan University: In the ranking of universities in Journalism and Communication in 2024, its programs were ranked second in China. In the QS World University Rankings by Subject in Communication and Media Studies in 2023, Wuhan University was ranked in the 51-100 range, demonstrating its professional competitiveness both domestically and internationally. Taking the Digital Media major as an example, it has set up theoretical courses such as *Digital Media Technology and Its Applications*, *Data Analysis and Data Mining*, as well as practical courses like *Audio-visual Works Analysis* and *Comprehensive Practice of Audio-visual Content Creation*,



enabling students to exercise their practical operation abilities while mastering professional knowledge.

Wuhan University of Technology: In the ranking of on-the-job postgraduate programs in Journalism and Communication, Wuhan University of Technology is among the top in Class C universities, indicating its competitiveness in teaching and research within this field. The Journalism and Communication major is one of the key construction disciplines in the School of Humanities and Law of the university. It has a secondary discipline master's degree point in *Digital Publishing* and a secondary discipline doctoral degree point in *Digital Communication Engineering*, which reflects the achievements and relatively high academic status of this major in discipline construction.

Hubei University: The Journalism major has been recognized as a national first-class undergraduate major construction site, which reflects its high-quality education and rigorous academic standards in undergraduate education. It also reflects that it has been widely recognized by society in terms of teaching concepts, teaching staff, teaching resources, and talent cultivation quality. Additionally, Journalism and Communication is a key discipline in Hubei Province. It has a first-level discipline master's degree point in Journalism and Communication, covering secondary disciplines such as Journalism and Communication, with a complete discipline system, providing a good platform for students to conduct in-depth learning and research.

2. Research Tools

This study utilized a semi-structured interview as its primary research tool. The researchers in collaboration with members of the expert focus group, conducted a seminar aimed at optimizing the ability indicators of creative media lecturers in Wuhan University, Wuhan University of Technology, and Hubei University.

3. Data collection

The data collection process for this research was carried out in three steps:

3.1 The researchers explored the research results of literature, textbooks and educational experts. Subsequently, scholars integrated the data and combined it with the factors and indicators for developing the competency of creative media instructors at universities in Hubei province in digital transformation era. They formulated factors, compiled the ability development



indicators, and then submitted them to the thesis supervisor to check their accuracy and appropriateness.

3.2 The researchers organized focus group discussions involving expert scholars from the participating universities. These experts were selected for their outstanding teaching and practical experience in this field. The researchers selected Wuhan University, Wuhan University of Technology, and Hubei University as the best practice case in terms of the factors and indicators for developing the competency of creative media instructors at universities in Hubei province in digital transformation era. Through interviews with nine experts, valuable insights were gathered regarding the factors and indicators for developing the competency of creative media instructors at universities in Hubei province in digital transformation era.

3.3 The information obtained from Step 3.1 and Step 3.2 was integrated to construct the factors and indicators for developing the competency of creative media instructors at universities in Hubei province in digital transformation era. After being refilled, these factors and indicators were sent to the Major Advisor and Co-Advisor for rechecking their accuracy and applicability.

4. Data analysis

This study adopts a qualitative and quantitative research approach. The researcher solicited opinions from experts with outstanding teaching and practical experience in this field through utilized a semi-structured interview to obtain data.

Results

The researcher conducted a literature review and studied previous research, synthesizing the components and indicators. Subsequently, components and indicators with a repetition frequency of 50% or higher were selected, resulting in 5 components and 20 indicators, as shown in Table 1.



Table 1

Factors and Indicators for Developing the Competency of Creative Media Instructors at Universities in Hubei Province in Digital Transformation Era Obtained through Literature Review and Previous Studies

	Factor	Indicator					
		A1. Subject knowledge in the taught discipline					
		A2. The ability to explain					
	A Tanahina Ahility	A3. Pedagogical skills					
	A. Teaching Ability	A4. The ability to measure and evaluate learning outcomes					
		A5. Teaching leadership					
		B1. Having knowledge of principles and theorie					
		B2. The ability to review literature					
	B. Scientific Research	B3. Having experience in conducting research					
	Capacity	B4. The ability to conduct research					
		B5. The ability to participate in academic exchanges and collaborations					
The competencies of creative media instructors		C1. The ability to design teaching by using technology					
media monuetoro	C. Technology	C2. The ability to evaluate learning outcomes by using technology					
	Application Ability	C3. The ability to provide educational information by using technology					
		C4. The ability to conduct online teaching					
		D1. The ability to be a team leader					
	D. Administrative	D2. The ability to communicate and coordinate					
	Capacity	D3. The ability to plan					
		D4. Collaborative ability					
	E. Ability to Build	E1. Communication methods					
	·	E2. Empathy for others					
	Relationships	E3. The ability to respond					



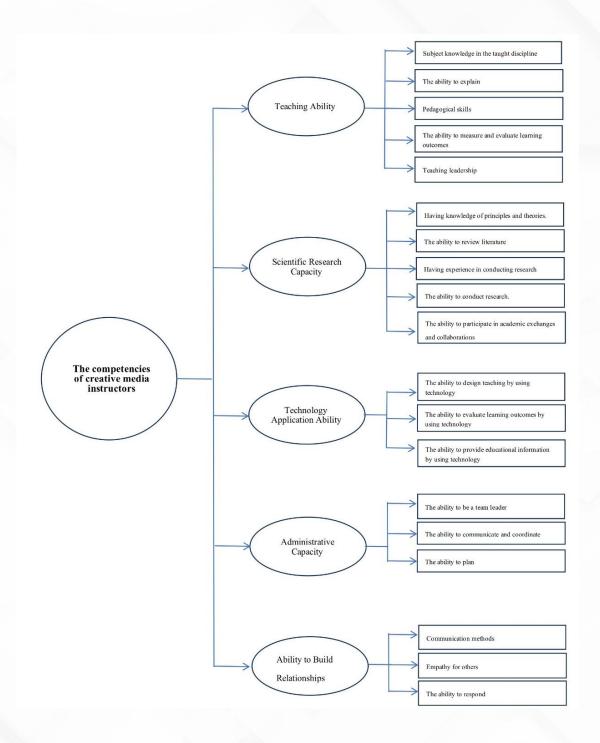
After the researcher synthesized the factors and indicators, as shown in Table 1, the factors and indicators were derived through a comprehensive review of literature and previous studies. Their validity and appropriateness were examined by expert evaluations conducted via focus group discussions with nine experts from best-practice universities, including Wuhan University, Wuhan University of Technology, and Hubei University. The data obtained from the interviews were analyzed using the content analysis method. It was found that all factors and indicators were accurate and appropriate, with the exception of the indicator under the technology application ability factor: C4. The ability to conduct online teaching. This indicator was removed following expert focus group, as it was determined that C3. The ability to provide educational information by using technology and C4. The ability to conduct online teaching were similar. Moreover, experts agreed that C3. The ability to provide educational information by using technology more comprehensively represents this ability. Therefore, C3. The ability to provide educational information by using technology was preserved, and C4. The ability to conduct online teaching was removed. The finalized factors and indicators for developing the competency of creative media instructors at universities in Hubei Province in Digital Transformation Era are shown in Figure 1.



Figure 1

The Factors and Indicators for Developing the Competency of Creative Media Instructors at

Universities in Hubei Province in Digital Transformation Era





Discussion and Conclusion

According to the results of this study, the researcher made the following conclusions:

1. The results of this research were discussion. There are mainly five influencing factors for the ability development strategies of creative media lecturers in colleges and universities in Hubei Province, namely Teaching Ability, Scientific Research Capacity, Technology Application Ability, Administrative Capacity, and Ability to Build Relationships. More research shows that the influencing factors of the ability development strategies of creative media lecturers in colleges and universities in Hubei Province obtained by researchers are consistent with the viewpoints of Cui, Y.J. and others. The findings of this study align with the perspectives of Cui, Y.J. (2022, pp. 78-80), believes that teaching abilities include: 1. Knowledge update ability, 2. Professional ability and rich teaching skills ability, 3. Teaching link organization and project control ability, 4. Technology application ability,5. Management ability and Communication, coordination and negotiation ability, 6. Teaching reform organization ability, 7. Relationship building ability, School-enterprise cooperation relationship building ability, 8. Teacher-student relationship building ability. The findings of this study align with the perspectives of Peng, S.Q. & Li, W.K. (2024, pp. 85-88): The teaching team can also share information and resources with other teaching teams and conduct exchanges and collaborations. For example, regularly hold academic lectures or teaching lectures, carry out demonstration classes for classroom teaching reform and other activities, impart experience to team teachers and even teachers of other teaching teams, promote the "passing on, helping and leading" in teaching, so as to radiate all grass-roots teaching organizations in the media category and better improve the teaching abilities and levels of all media major teachers. The findings of this study align with the perspectives of Guo, L. Y. (2024, pp. 88-90) believes that factors such as teachers' teaching ability, professional accomplishment, and moral character will deeply affect the growth of media students and even determine the quality of media professional talent cultivation. The findings of this study align with the perspectives of Wei, W. S. (2023, pp. 32-35+40) holds that most colleges and universities have already taken strengthening talent resource guarantee, enhancing the cultivation of intelligent media literacy and the training of intelligent media teaching ability as the priorities in the construction of the teaching staff. However, teacher training in some colleges and universities still fails to keep up with the pace of the update and iteration of intelligent media technology, which



leads to students' doubts about teachers' leading position in teaching activities. The findings of this study align with the perspectives of Wu, L. (2021, -pp. 85-96) states that on the basis of adhering to the subjectivity of disciplines and majors, it is necessary to expand the integration of multiple disciplines, establish an incentive mechanism, actively introduce high-level talents, improve the treatment of teachers in ethnic colleges and universities, enhance the teaching ability, practical ability and innovative ability of professional teachers, especially young teachers, carry out connotative scientific research, optimize the allocation of teaching staff resources, and build a platform for teachers' external exchanges and further studies.

According to the above viewpoints, the conclusion of this paper is similar to that of the above authors. Therefore, when improving the abilities of creative media lecturers in colleges and universities in Hubei Province, it is necessary to enhance their teaching abilities.

2. The influencing factors of the ability development strategies of creative media lecturers in Hubei Province also have similarities with the research of some scholars. For example:

This is consistent with the perspectives of Liu, H. (2024, pp. 62-64) pointed out that teachers should transform from knowledge imparters to guides and from traditional lecturers to interactive designers. They need to utilize modern information technology to construct a two-way communication ideological and political classroom, reform and innovate teaching methods to stimulate the vitality of the curriculum. Teachers should become proficient users of new media platforms and utilize new media technologies to innovate teaching presentation. Regarding relationship-building ability, in teacher-student relationship construction, teachers should pay attention to students' ideological trends through new media platforms. In promoting cross-cultural communication relationships, they should design multicultural teaching activities, guide students' cross-cultural communication and understanding, and cultivate global awareness and crosscultural communication skills. This is consistent with the perspectives of Liu, J. R. (2024, p.106) proposed a transformation in both teaching concepts and teaching practice ability. This transformation is based on the integration of various educational scenarios, the teaching role is shifted from "teacher-centered" to "learner-centered", the teaching behavior is changed from "teaching students knowledge" to "teaching students how to learn", and the teaching concept is transformed from "focusing on disciplines" to "focusing on educating people". Regarding the teaching ability to understand students based on data, Liu suggests that by relying on the



application of multi-dimensional educational data, teachers can dynamically collect and analyze students' learning process, homework performance, personality characteristics and other information, understand students' cognitive and non-cognitive states, recognize students' development differences, and provide targeted educational support. Liu further emphasizes the technical ability of educational resource integration. Teachers should rely on the integration of diversified educational resources, study the structure and use value of high-quality resources, introduce real life into the curriculum with the help of technology, connect external high-quality digital resources, reform educational concepts, and develop teaching courses. Lastly, in the context of educational digitalization, Liu highlights the technical ability of data application. Teachers need to rely on the application of multi-dimensional educational data, such as using digital platforms to collect and analyze various types of student information, realizing dataenabled education. The preliminary results of this research indicate that the ability development strategy for creative media lecturers in Hubei universities consists of five key components: Teaching Ability, Scientific Research Capacity, Technology Application Ability, Administrative Capacity, and Ability to Build Relationships. These constituent factors cover all aspects of the ability development of creative media lecturers, which can fill the research gaps in the ability development strategies of creative media lecturers in Hubei universities, optimize the ability development index system, improve the ability development system, enhance the effectiveness of the ability development strategies, and raise the overall level of the ability development of creative media lecturers in Hubei universities.

Suggestions:

- 1. The results of this study can be applied not only in Hubei Province but also in other universities with similar characteristics. After the modification and improvement of the factors and indicators of this system, it can also be promoted to other similar universities for high-quality development.
- 2. A study should be conducted to analyze the factors and indicators, examine the structural relationships of the variables, and further develop and validate the measurement model.
- 3. The further studies should be conducted to develop strategies for developing the competency of creative media instructors at universities in Hubei province in digital transformation era.



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Priority Needs for Innovative Leadership of School Administrators under the Primary Educational Service Area Offices in Inspection Region 13

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Abstract

This quantitative study aimed: 1) to examine the current and desirable conditions of innovative leadership among school administrators under the Primary Educational Service Area Office, Inspection Region 13, and 2) to analyze the priority needs for innovative leadership of school administrators under the Primary Educational Service Area Office, Inspection Region 13. Data were collected from a sample of 346 school administrators using a questionnaire. The collected data were analyzed using frequency, percentage, mean, and standard deviation. The study indicated that: 1) the overall current condition of innovative leadership among school administrators was rated at a high level ($\overline{X} = 3.80$, S.D. = 0.52), while the overall desirable condition of innovative leadership among school administrators was rated at the highest level ($\overline{X} = 4.59$, S.D. = 0.33). 2) The priority needs for innovative leadership among school administrators under the Primary Educational Service Area Office in the Inspection Region 13 were ranked as follows: the highest priority was risk management (PNI modified = 0.213), having a vision for change (PNI modified = 0.212), fostering creativity (PNI modified = 0.211), and teamwork and participation (PNI modified = 0.193), respectively.

Keyword: priority needs, innovative leadership, school administrators



Introduction

Education is a critical tool for developing a skilled workforce capable of living harmoniously with others in society amidst the rapid global changes. Education plays a critical role in creating a competitive advantage for nations. Thailand has therefore placed significant emphasis on managing education, as well as enhancing the potential and capabilities of Thai people, equipping them with skills, knowledge, abilities, and competencies that align with the demands of the labor market and national development. This effort aims to improve the quality of life for Thai citizens (Office of the Education Council, 2017). The government has established a policy vision for the economic development of Thailand, known as Thailand 4.0. This economic development model focuses on driving the nation's progress through innovation and leveraging human potential as the driving force. The goal is to empower individuals with knowledge and provide equal opportunities for all (Suvit Maesincee, 2017). The management of education must therefore create a new image that leads to practical implementation to develop educational institutions in the areas of skill development, learning and innovation, life and career skills, and information technology skills (Amonrat Techanok, 2020). Therefore, educational institutions must undergo a transformation from traditional operational systems to align with the evolving technology and society. As such, innovation serves as a mechanism that can establish a foundation for strengthening the organization and enabling the organization to become an innovative institution (Teera Runcharoen, 2014). As a result, school administrators play a crucial role in driving innovation within the institution by formulating policies and strategies that facilitate the implementation of such changes. Additionally, they are responsible for creating strategies to propel these policies forward and for fostering motivation and morale within the workforce. This is in accord with the Ministry of Education (2016) who mentioned the strategic framework for educational development must emphasize basic education and leadership development. This framework emphasizes the development of school administrators, teachers, and community participation. School administrators are required to cultivate leadership qualities and competencies in educational management, focusing on self-transformation to become innovative leaders. This involves continuous learning of new concepts, refining operational frameworks beneficial to educational institutions, and adopting novel approaches to create a work environment that fosters



innovation. Simultaneously, innovative thinking should be applied to address organizational challenges, promoting collaboration and cultivating a culture of innovation within the institution.

The Primary Educational Service Area Office under Inspection Region 13 comprises the primary educational service area offices located in the provinces of Chaiyaphum, Nakhon Ratchasima, Buriram, and Surin. These primary educational service area offices have been actively driving policies to establish innovative educational zones, including formulating operational plans and selecting pilot schools to serve as innovative areas. This initiative aims to advance educational development in these provinces by implementing strategies that foster innovation within schools. According to the study of Sanga Chanwiset, Somboon Tanya, and Sanguappong Chuanchom (2023), the model for managing educational quality assurance in basic education institutions under the primary educational service area offices in the Inspection Region 13 comprised monitoring and evaluation and educational quality development. In the planning process, personnel are appointed and assigned tasks to develop information systems for creating tools to monitor and evaluate the quality of education. Additionally, a timeline is established to oversee the implementation throughout the academic year. According to the organizational structuring process, personnel are assigned to collaboratively set target values and quality indicators for education, develop information systems, establish evaluation criteria, and create tools for monitoring and assessing the quality of education. Additionally, there is support, supervision, monitoring, and evaluation of the management and implementation in alignment with the educational quality development plan. Due to the organizational leadership process, administrators act as academic leaders with a clear vision and goals. They possess skills in motivating others, serve as exemplary role models, participate in planning and monitoring the quality of education, and utilize information technology to enhance their work. In the organizational control process, clear target values for the work plan are established, and responsibilities are assigned for monitoring and evaluating projects and activities. Systematic quality control of education is implemented in alignment with educational standards, with results being reported. Plans, projects, and activities that fail to meet the educational quality standards are reviewed and revised. Therefore, the development of innovative leadership among administrators is critical for fostering innovations that contribute to the improvement of educational quality in the modern era.



As previously stated, the researcher recognizes the importance of introducing innovations within educational institutions. To provide a framework for planning the transformation of educational establishments into innovation-driven organizations and to develop strategies for effective and efficient future implementation, the researcher aimed to examine the primary needs for innovative leadership among school administrators within the primary educational service area offices under Inspection Region 13.

Objectives

- 1. To examine the current and desirable conditions of innovative leadership among school administrators under the primary educational service area offices in the Inspection Region 13.
- 2. To analyze the priority needs for innovative leadership of school administrators under the primary educational service area offices in the Inspection Region 13.

Research Methodology

This research was a quantitative study, and the research process involved the following steps:

1. Population and Sample

- 1.1 Population: The population of this study consisted of 3,543 school administrators from the primary educational service area offices in Inspection Region 13, which includes the provinces of Chaiyaphum, Nakhon Ratchasima, Buriram, and Surin (Educational Information and Education Index, Academic Year 2023).
- 1 .2 Sample: The sample group consisted of 346 school administrators under the primary educational service area offices in the Inspection Region 13, encompassing the provinces of Chaiyaphum, Nakhon Ratchasima, Buriram, and Surin. The sample size was determined using Krejcie and Morgan's table (Krejcie & Morgan, as cited in Boonchom Srisa-ard, 2017) with a 95% confidence level. The sample was selected through a multi-stage random sampling process.

2. Research Instrument

The research instrument used in this study was a questionnaire designed to collect opinions on both the current and desirable conditions of innovative leadership among school administrators within the primary educational service area offices in Inspection Region 13. The



questionnaire was developed based on a review of relevant literature and previous research. It was a closed-ended questionnaire, consisting of two sections as follows:

Section 1 of the questionnaire focused on collecting general personal information from the respondents using a checklist format. It included questions related to gender, age, years of experience in school administration, and the size of the educational institution.

Section 2 of the questionnaire focused on assessing the current and desired conditions of innovative leadership among school administrators under the primary educational service area offices in Inspection Region 13 across five areas: 1) fostering an innovation-driven organizational culture, 2) having a vision for change, 3) promoting teamwork and participation, 4) encouraging creative thinking, and 5) managing risks. A 5-point Likert scale was used to rate responses in this section.

- 3. Steps for Designing and Developing the Research Instrument
- 3.1 The data collected from studying the innovative leadership of school administrators were synthesized and used to formulate the research questions.
- 3.2 The drafted questionnaire was submitted to the advisor for review to ensure its accuracy and clarity. Revisions were made based on the advisor's feedback.
- 3 .3 The revised questionnaire, incorporating the advisor's recommendations, was presented to five experts selected through purposive sampling. These experts included two faculty members specializing in educational administration from higher education institutions, one faculty member specializing in measurement and evaluation from a higher education institution, one senior professional school director, and one expert educational supervisor. The experts were tasked with evaluating the alignment of the questions with the defined key concepts using the Index of Item-Objective Congruence (IOC). Items with an IOC value of 0 .5 or higher were selected. Additionally, the reliability of the entire questionnaire was deemed acceptable if the overall reliability coefficient was 0.70 or higher (Patthraporn Kessung, 2023).
- 3.4 The revised questionnaire, incorporating the experts' recommendations, was pilot-tested with a sample group of 35 participants who were not part of the selected sample. Subsequently, the reliability of the questionnaire was analyzed using Cronbach's alpha method (Boonchom Srisa-ard, 2017). A reliability coefficient of 0.80 or higher was considered acceptable, ensuring that the questionnaire was reliable and suitable for data collection.



4. Data Collection

The researcher requested a letter from the Graduate School of Buriram Rajabhat University to be sent to the relevant educational service area offices to seek cooperation from the schools that are part of the sample group to collect data from school administrators under the primary education service area offices in Inspection Region 13. Following this, the researcher sent a letter to the educational service area offices requesting assistance in distributing the questionnaire to each of the sample schools. The questionnaire included a link and QR code for respondents to scan and complete the survey online via Google Forms. Once all responses were received, the researcher verified the completeness and accuracy of the questionnaires before proceeding with data analysis.

5. Data Analysis

- 5 . 1 The collected data were analyzed using frequency, percentage, mean, and standard deviation.
- 5.2 To analyze the priority needs for innovative leadership among school administrators in the Primary Education Service Area Office of Inspection Region 1 3, the Modified Priority Needs Index (PNI $_{modified}$) was used to prioritize and identify the key needs.

Results

1. Results of General Data Analysis

The study found that, out of the 346 respondents, the majority of school administrators were from the Surin Primary Education Service Area Office 1, with 48 participants (13.9%). Most participants held a master's degree (320 participants, or 90.5%) and had 5 to 10 years of experience in school management (159 participants, or 46.0%). Regarding school size, the majority of participants were administrators of small-sized schools (179 participants, or 51.7%).

2. The Current and Desirable Conditions of Innovative Leadership among School Administrators under the Primary Educational Service Area Offices in Inspection Region 13.

The analysis of the current and desirable conditions of innovative leadership among school administrators under the primary educational service area offices in Inspection Region 13 was conducted using the dual responses technique with a 5-point Likert scale. The data were analyzed for mean (M) and standard deviation (S.D.). The results are presented in Table 1.



Table 1

The overall and individual aspects of the current and desirable conditions of innovative leadership among school administrators under the Primary Education Service Area Office in Inspection Region 13.

		Curren	t Condition	ıs	Desirable Conditions				
The current and desirable conditions	\overline{x}	S.D	Interpre tation	Rank	\overline{x}	S.D	Interpreta tion	Rank	
Fostering an innovative-driven organizational atmosphere.	3.80	0.53	High	2	4.61	0.36	Highest	2	
2. Having a vision for change.	3.77	0.57	High	4	4.57	0.40	Highest	4	
3. Teamwork and participation.	3.87	0.61	High	1	4.62	0.37	Highest	1	
4. Creative Thinking.	3.79	0.55	High	3	4.59	0.38	Highest	3	
5. Risk Management	3.76	0.56	High	5	4.57	0.41	Highest	5	
Total	3.80	0.52	High		4.59	0.33	Highest		

Table 1 indicates that the overall current condition of innovative leadership among school administrators under the primary education service area offices in Inspection Region 13 is at a high level ($\bar{x} = 3.80$, S.D. = 0.52). Analyzing each aspect, "teamwork and participation" received the highest mean score ($\bar{x} = 3.87$, S.D. = 0.61), followed by "fostering an innovation-driven organizational atmosphere" ($\bar{x} = 3.80$, S.D. = 0.53). The aspect with the lowest mean score was "risk management" ($\bar{x} = 3.76$, S.D. = 0.56).

Furthermore, the overall desirable condition of innovative leadership among school administrators under the primary education service area offices in Inspection Region 13 ($\bar{x} = 4.59$, S.D. = 0.33). Analyzing each aspect, "teamwork and participation" achieved the highest mean score ($\bar{x} = 4.62$, S.D. = 0.37), followed by "fostering an innovation-driven organizational atmosphere" ($\bar{x} = 4.61$, S.D. = 0.36). The aspect with the lowest mean score was "risk management" ($\bar{x} = 4.57$, S.D. = 0.41).

3. The Priority Needs for Innovative Leadership of School administrators under the Primary Educational Service Area Offices in Inspection Region 13.

The analysis of the priority needs index for innovative leadership among school administrators under the primary education service area offices in Inspection Region 13 was



conducted using the Modified Priority Needs Index (PNI $_{\rm modified}$) to prioritize and identify key needs. The results are presented in Table 2.

Table 2

The overall and individual aspects of the priority needs for innovative leadership of school administrators under the Primary Educational Service Area Offices in Inspection Region 13.

The current and desirable conditions	Cui	rent Co	onditions	Desi	rable C	onditions		
	\bar{x}	S.D	Interpret ation	\bar{x}	S.D	Interpret ation	PNI modified	Rank
Fostering an innovative- driven organizational atmosphere.	3.80	0.53	High	4.61	0.36	Highest	0.213	2
2. Having a vision for change.	3.77	0.57	High	4.57	0.40	Highest	0.212	3
3. Teamwork and participation.	3.87	0.61	High	4.62	0.37	Highest	0.193	5
4. Creative Thinking.	3.79	0.55	High	4.59	0.38	Highest	0.211	4
5. Risk Management	3.76	0.56	High	4.57	0.41	Highest	0.220	1
Total	3.80	0.52	High	4.59	0.33	Highest	0.200	

Table 2 reveals that the overall average modified priority needs index (PNI $_{modified}$) for the innovative leadership needs of school administrators under the primary education service area offices in Inspection Region 13 is 0.20. When examining each aspect, the priority needs, ranked in order, are as follows: risk management (PNI $_{modified} = 0.220$), followed by fostering an innovation-driven organizational atmosphere (PNI $_{modified} = 0.213$), having a vision for change (PNI $_{modified} = 0.212$), creative thinking (PNI $_{modified} = 0.211$), and teamwork and participation (PNI $_{modified} = 0.193$), respectively.

Discussion and Conclusion

1. The overall current condition of innovative leadership among school administrators under the primary education service area offices in Inspection Region 13 is rated at a high level. This finding may be attributed to the inevitability of change in today's dynamic environment.



School administrators are required to utilize effective management techniques and leadership skills to implement strategies and plans that align with contemporary challenges. This ensures schools are well-equipped to adapt and respond to ongoing changes. These results align with the findings of Napaporn Srisukanthapuek (2023), who studied guidelines for the innovative leadership development of school administrators under the Bangkok Secondary Education Service Area Office, reporting that the overall current condition of innovative leadership was also at a high level. Additionally, when analyzing specific aspects, teamwork and participation were rated the highest in terms of the current condition of innovative leadership among school administrators under the primary education service area offices in Inspection Region 13. This may reflect the emphasis placed by administrators on fostering intellectual growth and achieving institutional success through supporting teamwork and encouraging staff participation in management processes. Conversely, the aspect with the lowest average score in the current condition of innovative leadership was risk management. This may be due to the challenges involved in cultivating an innovation-driven atmosphere within schools, which often requires task delegation, decentralization of authority, and the willingness to take risks and make decisive decisions.

2. The overall desirable condition of innovative leadership among school administrators under the primary education service area offices in Inspection Region 13 is rated at the highest level. This may be due to the critical role innovative leadership plays in fostering an innovation-driven atmosphere within schools, enabling them to align effectively with current demands. Achieving this requires modern management practices that seamlessly combine the scientific and artistic aspects of effective administration. Success indicators, including management quality, personnel development, and institutional excellence, ultimately shape the effectiveness of leadership and contribute to enhanced outcomes for schools. This finding is consistent with the study by Irada Chaleekarn and Yutthasat Kongpet (2024), which explored the innovative leadership needs of administrators under the Nakhon Ratchasima Primary Educational Service Area Office 7, reporting that the overall desirable condition of innovative leadership was rated at the highest level. Similarly, the study by Napaporn Srisukanthapuek (2023) found that the desirable condition for innovative leadership among school administrators in the Bangkok Secondary Education Service Area Office was also rated at the highest level.



3 . The overall average modified priority needs index (PNI modified) for the innovative leadership priorities of school administrators under the primary education service area offices in Inspection Region 13 is 0.20. The priorities are ranked as follows: the highest priority is risk management (PNI modified = 0.22), followed by fostering an innovation-driven organizational atmosphere, having a vision for change, and creative thinking (each with PNI modified = 0.21). The lowest priority is teamwork and participation, with a PNI-modified value of 0.19. This prioritization may reflect the recognition among school administrators of the critical importance of fostering innovative leadership within educational institutions. Many administrators are prepared to advance their schools by focusing on self-development, initiating innovations, and employing modern management techniques to enhance educational administration. These findings align with the study by Praiya Laekasin, Songyos Kawmongkon, and Duangkamol Kaewdaeng (2023), which examined the development of innovative leadership models for primary school administrators under the Chanthaburi Primary Educational Service Area Office 2. Their research found that the overall priority need for innovative leadership development was at a moderate level.

Suggestions

1. Recommendations from the Study

The study identified risk management as the highest priority need for innovative leadership among school administrators under the Primary Educational Service Area Office in Inspection Region 13. To address this, school administrators should critically evaluate their previous visions, missions, and action plans to formulate strategies that effectively mitigate operational risks. This process should incorporate systematic and regular monitoring and follow-up to minimize disruptions and ensure the continuity of work processes.

2. Recommendations for Future Research

- 2.1 Future research should focus on developing strategies to enhance the innovative leadership skills of school administrators, thereby improving the effectiveness of their leadership qualities.
- 2.2 Studies should investigate the factors contributing to the success of innovative leadership among school administrators, providing a comprehensive framework for advancing schools toward organizational excellence.



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The Professional Competencies of High School Mathematics Teachers in Hubei Province, People's Republic of China: A Synthesis Study

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Abstract

This paper aimed to synthesize the components of professional competencies of high school mathematics teachers in Hubei Province, People's Republic of China. The target group used in the study consisted of 10 previous studies, theories and related documents. The research instrument was the frequency distribution comprehensive table. This study employed content analysis to synthesize findings from academic databases and explored the significance, scope, and importance of enhancing the professional competencies of high school mathematics teachers in Hubei Province, People's Republic of China. The frequency distribution comprehensive table for synthesis was only selected the components for high school teachers' professional mathematics competencies with a frequency of more than 60%. The research results showed that there are three relevant professional competencies that high school mathematics teachers including 1) mathematics knowledge; 2) mathematics skills; and 3) mathematics ethics. These competencies enable high school teachers to accurately convey mathematics concepts and cultivate students' mathematics thinking. By enhancing professional competencies, the high school mathematics teachers can better meet the universal demands of teaching and education.

Keyword: Professional competencies, High school mathematics teachers, Hubei province



Introduction

China has a total of 67,506 secondary education schools and 7,085,365 full-time teachers (Ministry of Education of China, 2023). To meet the demand for high-quality teachers in the current development of primary and secondary education, the Chinese Ministry of Education has established teacher qualification examinations and the "Professional Standards for Secondary School Teachers (Trial)", clarifying the role and professional requirements of teachers (State Council of China, 2010; China Education Yearbook, 2012; Ministry of Education of China, 2012). Additionally, the "Compulsory Education Curriculum Plan and Standards" provides detailed regulations on the implementation goals and specific content of teaching curricula (Ministry of Education of China, 2022).

Based on the aforementioned documents, the Hubei Provincial Department of Education formulated the "Implementation Measures for Compulsory Education Curriculum in Hubei Province (Trial)" and the "Implementation Measures for General High School Curriculum in Hubei Province (Trial)." The documents emphasize promoting teachers' professional development through expert guidance, peer collaboration, and self-reflection, building a diversified teacher training mechanism, improving teacher evaluation systems, and stimulating teachers' intrinsic motivation (Hubei Provincial Department of Education, 2023). Currently, Hubei Province has 2,731 secondary schools and 251,208 full-time teachers (Ministry of Education of China, 2023).

Based on an assessment of the academic performance of 69,405 high school students in Shiyan City, mathematics was the worst-performing subject, with an average score of only 38.51 points from 100, showing a significant gap compared to other subjects. The research results indicate that improving mathematics performance is of great necessity and practical significance.

A survey from the Chinese Mathematics Education Symposium revealed that only 15% of teachers met teaching standards, 65% delivered dull lectures, and 20% failed to explain clearly (Zheng& Zhou, 2020). In response, the "High School Mathematics Curriculum Standards (2017 Edition, Revised 2020)" emphasized that teachers should help students master mathematical knowledge, concepts and methods, enhance mathematical literacy, and cultivate logical thinking, practical skills and innovation. The new standards place greater emphasis on developing students' core mathematical competencies, requiring teachers to continuously improve their professional abilities to promote students' holistic development (Chinese Ministry of Education, 2020).



The new curriculum standards emphasize that secondary school mathematics teachers should be guided by professional teaching standards to comprehensively improve their professional competencies, teaching abilities, and mastery of mathematical disciplines and educational theories (Ministry of Education of China, 2020). However, an assessment of the academic performance of 69,405 high school students in Shiyan City, Hubei Province, revealed that mathematics is the worst-performing subject, with an average score of only 38.51 points. Therefore, researching the current state of professional competency development among high school mathematics teachers in Hubei Province has become an urgent issue. Constructing a professional competence framework for high school mathematics teachers will not only enhance teachers' abilities but also hold significant theoretical and practical importance for improving the quality of mathematics education.

Purpose of the Research

To synthesize the components of professional competencies of high school mathematics teachers in Hubei Province, People's Republic of China

Research Method

3.1 Data Source

This study conducted a comprehensive analysis of the theories, concepts and previous research works related to the components of the professional competencies of high school mathematics teachers in Hubei Province. The researcher studied 10 related research papers and theories between 2014 to 2024. This included the following scholars and years: Zhu et al. (2024), Zhu (2023), NCTM (2020), Chinese Ministry of Education (2022), Li (2020), Scheiner et al. (2019), José Carrillo-Yañez (2018), Ding (2016), Pino-Fan et al. (2015), and Dohrmann et al. (2014).

3.2 Data Collection

The data were collected through the literature from the libraries and educational institutions of colleges and universities in China and abroad, academic textbooks and related research works, and online databases.



3.3 Data Analysis

The collected data were analyzed by using content analysis technique, and then summarized and organized those data according to the documentary analysis form. A frequency distribution table was created to consolidate the findings. This summary table organized works, theories, and related literature pertaining to the components of the professional competencies of high school mathematics teachers Hubei Province, People's Republic of China.

Research Results

Based on the 10 related research papers and theoretical reviewed, the author created a table centered on professional competencies of high school mathematics teachers to illustrate the core elements included in existing theories and related literature as shown in Table 1 below.

Table 1

Components of Professional Competencies for High School Mathematics Teachers

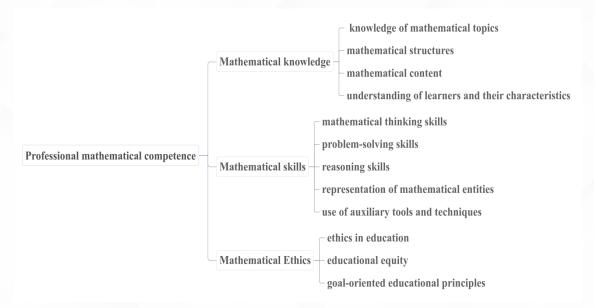
	Author's Name (Academic/ Academician/ Institute)										
Professional Competencies	Dohrmann. et al. (2014)	Pino-Fan et al. (2015)	Ding, (2016)	José Carrillo-Yañez (2018)	Scheiner et al. (2019)	Li, (2020)	Chinese Ministry of Education (2020)	NCTM (2020)	Zhu, (2023)	Zhu, et al. (2024)	Frequency
1. Mathematics Knowledge	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
2. Mathematics Skills		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	9
3. Mathematics Ethics	\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	8
4. Mathematics Practice	\checkmark	✓					\checkmark	\checkmark			4
5. Mathematics Learning Environment							✓	✓			2



Table 1 summarizes five types of professional competencies of high school mathematics teachers discussed in 10 related research papers and theories through a literature review. This study selected three observable variables with a frequency of over 60% as the core components of professional competencies of high school mathematics teachers as follows: 1) Mathematical Knowledge including knowledge of mathematical topics, mathematical structures, mathematical content, and understanding of learners and their characteristics; 2) Mathematical Skills including mathematical thinking skills, problem-solving skills, reasoning skills, representation of mathematical entities, and the use of auxiliary tools and techniques; 3) Mathematical Ethics including ethics in education, educational equity, and goal-oriented educational principles as shown in Figure 1 below.

Figure 1

Components of Professional Competencies for High School Mathematics Teachers



The details of each component of professional competencies of high school mathematics teachers are as follows:

1. Mathematical Knowledge

1.1 Knowledge of Mathematical Topics refer to a deep understanding and mastery of a specific subject or theme within mathematics, such as algebra, geometry, or probability and



statistics. It focuses solely on a particular area or topic in mathematics, emphasizing specialized knowledge of that subject, and its scope is relatively narrow.

- 1.2 Mathematical Structures refer to the understanding of the inherent logical structure and organizational framework of mathematical knowledge, including the connections, hierarchies, and frameworks among mathematical concepts. It emphasizes the systematic and logical nature of mathematical knowledge, focusing on the relationships between concepts and the overall architecture, and is characterized by its systematic.
- 1.3 Mathematical Content refers to the understanding of the overall content of the mathematical discipline, including concepts, principles, methods, and their interrelationships, such as mathematical concepts, mathematical principles, and mathematical methods. It emphasizes a comprehensive grasp of mathematical knowledge and has a broad scope.
- 1.4 Since students vary in their cognitive characteristics, learning styles, interests, motivations, and difficulties in mathematics learning, understanding learners and their characteristics refers to high school teachers' deep comprehension of students' cognitive traits, learning styles, interests, challenges, and individual differences in the process of learning mathematics. This understanding helps teachers design more effective teaching strategies, meet the diverse needs of students, and promote students' holistic development in mathematics learning.

2. Mathematical Skills

- 2.1 Mathematical Thinking Skills refer to the comprehensive cognitive ability of high school mathematics teachers in mathematical activities, enabling them to abstract mathematical models from concrete problems and summarize general conclusions by observing patterns. This ability not only includes the understanding of mathematical knowledge but also emphasizes holistic thinking approaches and cognitive processes in problem-solving, making it a core competency in mathematics learning, teaching, and research.
- 2.2 Problem-solving Skills refer to the capability of high school mathematics teachers to analyze mathematical problems, formulate strategies, and find solutions when faced with such challenges.
- 2.3 Reasoning Skills refer to the capability of high school mathematics teachers to apply logical rules for mathematical reasoning and proof, specifically including deductive



reasoning and inductive reasoning, such as in mathematical proofs, theoretical research, and logic training.

- 2.4 Representation of Mathematical Entities refer to the ability of high school mathematics teachers to express mathematical concepts, relationships, or structures using symbols, graphs, tables, models, and other forms, emphasizing the visualization or symbolic representation of mathematical knowledge.
- 2.5 The Use of Auxiliary Tools and Techniques refer to the ability of high school mathematics teachers to proficiently utilize tools or technologies to assist in mathematics learning or problem-solving, and to complete tasks with the help of these tools or technologies. Examples include using calculators or computer software for complex calculations, employing geometric drawing boards to create diagrams, and utilizing programming tools for data analysis or modeling.

3. Mathematical Ethics

- 3.1 Ethics in Education refer to the moral norms and behavioral standards that high school mathematics teachers follow in mathematics education, emphasizing the responsibilities, integrity, and respect of both teachers and students in the teaching and learning process, such as academic integrity, teacher responsibilities, and respect and care.
- 3.2 Educational Equity refers to high school mathematics teachers ensuring that all students have equal access to learning opportunities and resources in mathematics education, regardless of their background, abilities, or socioeconomic status. In principle, it ensures that all students can participate in high-quality mathematics courses and activities, avoids unfair treatment due to factors such as gender, race, or economic status, and provides appropriate support for students with diverse needs, such as offering additional tutoring for those struggling with learning.
- 3.3 Goal-oriented Educational Principles refer to high school mathematics teachers in mathematics education focusing on clear learning objectives as the core, designing teaching content, methods, and assessment approaches to ensure students achieve the expected learning outcomes. This principle emphasizes the clarity of goal setting, the relevance of teaching activities, and the measurability of learning outcomes, aiming to enhance students' mathematical abilities and learning effectiveness through systematic instructional design and evaluation.



Discussion

Based on the review of relevant research literature, it has been found that there are both similarities and differences in the details regarding the constituent elements of professional competence among high school mathematics teachers as examined by various scholars. Researchers have only been able to summarize a portion of the items. The results show that the professional competence of high school mathematics teachers consists of the following three key components:

5.1 Mathematics Knowledge

Mathematics knowledge refers to the theoretical systems and methods of concepts of quantity, structure, space and change that teachers have accumulated over a long period of study and practice. It is a highly logical, abstract and applied knowledge stock. Mathematical knowledge competency is one of the indispensable core literacies in modern society, and is widely used in the fields of science, engineering, economics, finance and technology. The finding is consistent with Zhu et al. (2024), Zhu (2023), Li (2020), Qi (2018), Luo (2018), José Carrillo-Yañz (2018), Mary REID (2017), Ding (2016), Liston (2015), and Pino-Fan et al. (2015).

5.2 Mathematics Skills

Mathematical skills refer to the specific skills that teachers acquire in the study and practice of mathematics that enable them to solve mathematical problems, apply mathematical knowledge, and reason logically in an effective manner. Mathematical skills include not only basic computational skills, but also involve higher-level thinking and practical skills. The finding is consistent with Zhu et al. (2024), Hatisaru (2024), Zhu (2023), Pino-Fan et al. (2022), Ma (2021), Li (2020), Genc (2019), Vintere (2017) Hendriana (2017) and Niss et al. (2016).

5.3 Mathematics Ethics

Mathematics ethics refer to the ethical norms and professional conduct that teachers should follow in the process of teaching and applying mathematics and in dealing with students. Although mathematics itself is a highly abstract and logically rigorous subject, it still involves many ethical issues such as fairness and objectivity in its dissemination and application. The core of mathematical ethics lies in ensuring fairness, integrity and social responsibility in mathematical activities. The finding is in line with Chinese Ministry of Education (2022), Ding (2022), Sun



(2020), Ernest (2019), Forgasz et al. (2019), Li (2018), Boistrup et al. (2018), Zou (2017), Kaiser et al. (2017) and Aydin (2016).

Conclusion

The researcher conducted a content analysis and organization based on a review of relevant literature and research findings. Data compilation were performed using a frequency distribution synthesis table and the components of mathematics teachers' professional competencies in high schools in Hubei Province was constructed. This table includes three components: 1) Mathematics knowledge; 2) Mathematics skills; and 3) Mathematics ethics. The components of high school mathematics teachers' professional competencies reveal what factors should be included in a model to enhance the professional competencies of mathematics high school teachers. In summary, the components of high school teachers' professional mathematical competencies reveal the key factors in enhancing their capabilities. By identifying specific indicators and emphasizing their importance, this study provides theoretical support for improving the professional competencies of high school mathematics teachers in Hubei Province, ultimately contributing to the goal of enhancing students' mathematical performances.

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The Awareness and Motivation of Higher Education Institution Students'

Pro-environmental Behavior in Tourism College of Zhejiang,

Zhejiang Province in the People's Republic of China

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Abstract

This study aims to explore the awareness and motivation of pro-environmental behavior among students at the Tourism College of Zhejiang in the People's Republic of China. A comprehensive questionnaire survey was conducted on 373 students, using a five-point scale. The research tool includes three primary indicators—awareness, motivation and behavior, which are further divided into thirteen secondary indicators. The analysis mainly employs calculations of mean and standard deviation. The results show that awareness and motivation are positively correlated with behavior, indicating that higher awareness and motivation lead to more sustainable actions. This study emphasizes the need for targeted educational interventions to enhance students' environmental awareness and motivation, thereby bridging the gap between awareness and behavior and promoting sustainable practices within higher education institutions. The findings provide valuable insights for educators and policymakers, aiming to cultivate a more environmentally conscious student population in the field of tourism and contribute to a greener future.

Keyword: Pro-environmental behavior (PEB), awareness, motivation



Introduction

In recent years, the balance between economic development and environmental protection has become a global priority (Liu et al., 2021, p. 2). Xi Jinping, who is General Secretary of China, mentioned that we have to protect the ecological environment as our eyes (Government of China, 2022, p. 1). As a more economically developed Chinese province, Zhejiang has a higher habitat sustainability level than most regions in China (Lin & Hou, 2023, pp. 5-12).

Awareness and motivation play key roles in shaping pro-environmental behaviors (Pestana et al., 2020, p. 4). Students in the higher education institutions are the main force of green low-carbon development and the promotion of ecological environment and health literacy (Lu, 2018, p. 36). These students play a crucial role in promoting the construction of ecological civilization and the sustainable development of society (Wu et al., 2023, pp. 75-77).

This study aims to explore in depth the awareness and motivation of pro-environmental behaviors among students in higher education institutions in Zhejiang Province of China, in order to providing theoretical support and practical guidance for environmental education and practical activities in higher education institutions.

Objective

The objectives include: (1) Assessing the current level of awareness and motivation regarding pro-environmental behavior among students in higher education institutions; (2) Investigating the correlation between awareness, motivation, and actual pro-environmental behavior; and (3) Providing recommendations for targeted educational interventions to enhance students' environmental awareness and motivation, thereby promoting sustainable practices within higher education institutions. The ultimate goal is to contribute to the development of a more environmentally conscious student population in the field of tourism and support the sustainable development goals of Zhejiang Province.

Research Methodology

Population and Samples

The study population was students at Tourism College of Zhejiang during the academic year 2024, with a total population of 13,007 (Tourism College of Zhejiang, 2024, p. 1). A multi-



staged random sampling method was used, referring to Krejcie & Morgan (1970, pp. 607-610) for sample sizes dtermination. The samples were stratified by major and grade of 373 participants.

Research Instruments

The object of the study was a questionnaire, which was divided into two parts.

Part One: general information about the respondents, answered in a multiple choice format.

Part Two: Students' Pro-Environmental Behavior Awareness and Motivation at Tourism College of Zhejiang in China, utilizing a 5-point Rating Scales, which was based on the Likert Scales (Wiersma & Jurs, 2009, pp. 200-205). The questionnaire validity was evaluated by the Index of Item-Objective Congruence (IOC) (Rovinelli & Hambleton, 1997, pp. 49-56). Distinguishing power was analyzed via Pearson Correlation, selecting questions with ≥0.20 power. The questionnaire reliability was assessed by the Cronbach's Alpha (Wiersma & Jurs, 2009, p. 335). The results showed that the questionnaire had an IOC of 0.50 - 1.00 and a Cronbach's alpha coefficient of 0.96. Additionally, the Cronbach's alpha coefficients of all the thirteen dimensions were above 0.80. It shows high internal consistency and reliability, making the questionnaire as a reliable and trustworthy research tool.

Data analysis

The statistics for quantitative data analysis were percentage, mean, standard deviation and validity index and qualitative data were analyzed through content analysis. The data were presented in tabular form and the significance of the mean is as follows:

- 4.51-5.00 has the highest operationalization.
- 3.51-4.50 has high operationalization.
- 2.51-3.50 has medium operability.
- 1.51-2.50 low operability.
- 1.00-1.50 lowest operability. (Wiersma & Jurs, 2009, pp. 200-205).

Results

1) Level 1 Indicators of Components of Awareness and Motivation for Pro-Environmental Behavior among Students of Tourism College of Zhejiang in China



Table 1

Means and Standard Deviations of the Components of Awareness and Motivation of Pro-Environmental

Behavior for Students in Tourism College of Zhejiang in China

Components	\overline{x}	S.D.	Interpretation
1 Awareness	3.80	0.62	High
1.1 Aspects of Environmental Education	3.86	0.73	High
1.2 Aspects of Attitude and Emotion	3.71	0.90	High
1.3 Aspects of Behavioral Tendency	3.72	0.78	High
1.4 Aspects of Cognitive State	3.90	0.72	High
2 Motivation	3.75	0.65	High
2.1 Aspects of Goals	3.68	0.91	High
2.2 Aspects of Values	3.66	0.75	High
2.3 Aspects of Self-regulation	3.81	0.76	High
2.4 Aspects of Needs and Desires	3.79	0.80	High
2.5 Aspects of Interests	3.72	0.77	High
2.6 Aspects of Environment	3.86	0.84	High
3 Behavior	3.84	0.67	High
3.1 Private Sphere	3.82	0.81	High
3.2 Public Sphere	3.82	0.84	High
3.3 Organizational Level	3.89	0.80	High
Total	3.85	1.12	High

Table 1 shows that the mean values of the 3 first-level indicators and 13 second-level indicators in the awareness and motivation of pro-environmental behaviors for the students of Tourism College of Zhejiang are all between 3.51 and 4.50, indicating a high overall operability. Behavior was the most and Motivation was the least actionable level 1 indicator. Aspects of Cognitive State was the most and Aspects of Values was the least actionable level 2 indicator.

2) Aspects of Environmental Education



Table 2

Secondary indicator "Aspects of Environmental Education" content and mean and standard deviation of items

Aspects of Environmental Education	\overline{x}	S.D.	Interpretation	Ranking
1) I understand global climate change and its impact on	3.44	0.94	High	5
the environment.				
2) I am able to identify local environmental problems and	3.68	0.85	High	4
their causes.	3.06	0.63	High	7
3) What I learn about environmental protection through	2 72	0.86	High	3
my courses has a positive impact on my behavior.	3.72	0.80	High	3
4) I think universities should offer more courses on	4.24	0.01	TT: 1	1
environmental protection.	4.24	0.81	High	1
5) I often learn about environmental issues through the	4.20	0.04	TT: 1	2
media or online resources.	4.20	0.94	High	2

According to Table 2, the students have diverse ways of acquiring environmental protection knowledge and have higher expectations for school programs, while some students still have insufficient mastery of this knowledge.

3) Aspects of Attitude and Emotion

Table 3

Secondary indicator "Aspects of Attitude and Emotion" content and mean and standard deviation of items

Aspects of Attitude and Emotion	\overline{x}	S.D.	Interpretation	Ranking
1) I am concerned about environmental issues.	3.82	1.07	High	3
2) I believe that personal action has a positive impact on environmental protection.	3.61	1.09	High	4
3) I am willing to make sacrifices to protect the environment.	3.91	1.06	High	1



Aspects of Attitude and Emotion	$\overline{\boldsymbol{x}}$	S.D.	Interpretation	Ranking
4) I have a positive attitude towards environmental protection activities.	3.89	1.10	High	2
5) I think environmental protection is everyone's responsibility.	3.32	1.17	High	5

The data in Table 3 reveals that there may be differences in students' perception of environmental responsibility.

4) Aspects of Behavioral Tendency

Table 4

Secondary indicator "Aspects of Behavioral Tendency" content and mean and standard deviation of items

Aspects of Behavioral Tendency	<u>x</u>	S.D.	Interpretation	Ranking
1) I am often involved in environmental activities on	4.10	0.00	TT: -1.	1
campus.	4.10	0.88	High	1
2) I tend to buy environmentally friendly products.	3.57	1.11	High	4
3) I am willing to recommend others to use	2.20	1.05	TT: 1	_
environmentally friendly products.	3.38	1.05	High	5
4) I minimize waste generation in my daily life.	3.83	0.93	High	2
5) I often recycle items.	3.75	0.81	High	3

According to Table 4, question 2 and 4 is relatively lower, which may be associated with individuals' perception of their social influence.

5) Aspects of Cognitive State



Table 5

Secondary indicator "Aspects of Cognitive State" content and mean and standard deviation of items

Aspects of Cognitive State	\overline{x}	S.D.	Interpretation	Ranking
1) I know how my environmental behavior affects the environment.	3.74	0.81	High	4
2) I believe I have enough knowledge about environmental protection to make informed choices.	4.14	0.83	High	1
3) I often think about how to improve my environmental behavior.	3.91	0.96	High	3
4) I see environmental protection as a continuous learning process.	4.03	0.86	High	2
5) I realize that I need to keep my environmental knowledge up-to-date.	3.66	0.90	High	5

The data in Table 5 shows that the mean values for all indicators are relatively high, ranging from 3.60 to 4.10, pointing that students have a clear understanding of environmental behaviors.

6) Aspects of Goals

Table 6

Secondary indicator "Aspects of Goals" content and mean and standard deviation of items

Aspects of Goals	\overline{x}	S.D.	Interpretation	Ranking
1) I have clear environmental goals and work hard to	4.01	0.05	TT: -1.	1
achieve them.	4.01	0.85	High	1
2) I tend to choose study and research programs that	2.01	1.00	TT: 1	2
contribute to environmental protection.	3.81	1.09	High	2
3) I set specific and clear action goals when I participate	2.52	1.00	TT: 1	4
in environmental activities.	3.52	1.00	High	4



Aspects of Goals	\overline{x}	S.D.	Interpretation	Ranking
4) I often think about how I can contribute to	3 75	1.10	Hioh	3
environmental protection through my personal actions	3.73	1.10	High	5
5) I measure my success by setting and achieving environmental goals	3.32	1.24	High	5
environmental goals.	3.32		C	

Table 6 indicates that the average value for question 1 is relatively high, while the average for question 5 is slightly lower, suggesting that some students may have deficiencies in associating goals with their measure of success.

7) Aspects of Values

Table 7
Secondary indicator "Aspects of Values" content and mean and standard deviation of items

Aspects of Values	\overline{x}	S.D.	Interpretation	Ranking
1) I believe it is everyone's moral responsibility to protect	4.02	0.84	High	1
the environment.				
2) I choose to support companies that have environmental	3.48	0.96	High	4
protection as a core value.	5.10	0.70	111511	·
3) I am willing to invest time and energy in environmental	3.51	0.97	High	3
protection.	3.31	0.97	High	3
4) I tend to socialize with people who value	2 22	0.06	II; ~1.	5
environmental protection.	3.32	0.96	High	5
5) I think universities should integrate environmental	4.00	0.83	High	2
values into the education system.	T.00	0.03	Tilgii	2

Table 7 suggests that question 1 and 5 scored relatively high, while question 4 scored lower, reflecting differences in students' practice of environmental values.

8) Aspects of Self-regulation



Table 8

Secondary indicator "Aspects of Self-regulation" content and mean and standard deviation of items

Aspects of Self-regulation	\overline{x}	S.D.	Interpretation	Ranking
1) I am able to self-motivate and adhere to	2 27	1 12	II; ~l.	5
environmentally friendly behaviors.	3.27	1.12	High	5
2) I ensure that my behavior meets environmental	4 1 4	0.94	III: ~l.	1
standards by self-monitoring.	4.14	0.84	High	1
3) I regularly reflect on my behaviors to make sure they	2 72	0.70	TT: -1.	4
are environmentally friendly.	3.73	0.78	High	4
4) I use plans and reminders to help me stick to	4 1 1	0.06	TT: 1	2
environmentally friendly behaviors.	4.11	0.86	High	2
5) I am able to self-adjust to overcome barriers to	2.00	1.04	TT: 1	2
environmentally friendly behaviors.	3.80	1.04	High	3

The data in Table 8 shows that question 2 and 4 scored well, while question 1 scored lower, suggesting that students need improvement in the area of self-motivation.

9) Aspects of Needs and Desires

Table 9

Secondary indicator "Aspects of Needs and Desires" content and mean and standard deviation of items

Aspects of Needs and Desires	$\overline{\boldsymbol{x}}$	S.D.	Interpretation	Ranking
1) I aspire to have a positive impact on the environment	2 41	1.00	III al.	5
through my actions.	3.41	1.08	High	3
2) I expect to fulfill my sense of social responsibility by	2 42	1 1 /	TT: -1.	4
participating in environmental activities.	3.42	1.14	High	4
3) I expect my environmental behavior to be recognized	4.15	0.00	TT: 1	1
by others.	4.15	0.90	High	1



Aspects of Needs and Desires	\overline{x}	S.D.	Interpretation	Ranking
4) I aspire to improve my quality of life through my environmental behavior.	3.84	0.98	High	3
5) I aspire to learn more about environmental protection.	4.12	0.85	High	2

Table 9 reflects that some of the students' needs have not been fully activated.

10) Aspects of Interests

Table 10

Secondary indicator "Aspects of Interests" content and mean and standard deviation of items

Aspects of Interests	\overline{x}	S.D.	Interpretation	Ranking
1) I have a high interest in learning about environmentally	3.58	0.89	High	4
related topics.	3.30	0.07	mgn	7
2) I tend to participate in activities that stimulate my	111	0.84	III: ~l.	1
interest in environmental protection.	4.11	0.84	High	1
3) I like to explore new environmental technologies and	2.50	1.02	TT: 1	2
methods.	3.59	1.02	High	3
4) I am interested in movies, books and lectures about	2 42	1.00	TT: 1	-
environmental topics.	3.42	1.09	High	5
5) I am willing to spend time on researching and	2.00	0.06	*** 1	2
discussing environmental issues.	3.90	0.86	High	2

Table 10 reveals that quesiton 2 has a high mean value, while question 4 scored lower. This suggests that students have varying levels of receptiveness to different environmental interest activities.

11) Aspects of Environment



Table 11

Secondary indicator "Aspects of Environment" content and mean and standard deviation of items

Aspects of Environment	\overline{x}	S.D.	Interpretation	Ranking
1) I am concerned about environmental issues on and off	4.05	0.95	High	1
campus.				
2) I tend to choose products and services that have less	3.87	1.05	High	3
impact on the environment.	3.07	1.03	111511	3
3) I think regularly about ways to reduce my ecological	3.61	1.01	High	5
footprint.	3.01	1.01	High	J
4) I am willing to make changes in my lifestyle to	3.84	1.02	High	4
minimize negative impacts on the environment.	3.04	1.02	nigii	4
5) I believe that individuals' daily behaviors can have a	2.04	0.02	III: al.	2
positive impact on environmental protection.	3.94	0.92	High	2

According to Table 11, the averages for question 1 and 5 are relatively high, while the average for question 3 is relatively low. There are differences among students in their concern for environmental issues and their consideration of actions.

12) Private Sphere

Table 12

Secondary indicator "Private Sphere" content and mean and standard deviation of items

Private Sphere	\overline{x}	S.D.	Interpretation	Ranking
1) I often turn off appliances that are not in use to	4.03	0.97	Uigh	2
conserve energy.	4.03	0.97	High	2
2) I tend to buy recycled or reusable products.	3.44	0.92	High	5
3) I minimize the use of single-use plastic products.	3.82	1.12	High	3
4) I try to adopt water conservation measures in my daily	4.09	0.83	High	1
life.	4.09	0.83	High	1



Private Sphere	\overline{x}	S.D.	Interpretation	Ranking
5) I usually participate in waste separation and recycling	3.71	0.87	High	1
activities.	3./1	0.67	nigii	4

From the data of Table 12, it reflects an imbalance in students' personal environmental behaviors.

13) Public Sphere

Table 13
Secondary indicator "Public Sphere" content and mean and standard deviation of items

Public Sphere	\overline{x}	S.D.	Interpretation	Ranking
1) I support and participate in environmental activities	4.04	0.98	High	1
organized on campus.				
2) I am willing to participate in tree planting or clean-up	2 27	1.04	Hial.	5
activities in the community.	3.37	1.04	High	5
3) I encourage people around me to participate in	4.02	0.93	High	2
environmental actions together.	4.02	0.93	High	L
4) I tend to share environmental information on social	3.78	0.98	High	4
media.	3.76	0.70	mgn	т
5) I participate in discussions and initiatives on public	3.89	1.05	Uigh	3
environmental issues.	3.09	1.03	High	3

It can be observed from Table 13 that there are differences in students' participation levels across various public environmental activities.

14) Organizational Level



Table 14

Secondary indicator "Organizational Level" content and mean and standard deviation of items

Organizational Level	\bar{x}	S.D.	Interpretation	Ranking
1) I support the environmental policies and measures	4.20	0.79	II: ~l.	2
implemented by the University.	4.20	0.78	High	2
2) I think the University should provide more courses and	1.26	0.74	TT: -1.	1
activities related to environmental protection.	4.30	0.74	High	1
3) I am willing to participate in environmental programs	2.00	1.06	TT: 1	2
or research at the University.	3.90	1.06	High	3
4) I suggest the Student Union or student organizations to	2.47	1.16	II: -1.	5
organize activities related to environmental protection.	3.47	1.16	High	5
5) I expect the University to provide more				
environmentally friendly facilities on campus, such as	3.50	0.98	High	4
recycling bins for used batteries.				

Based on Table 14, the students have high expectations for the university to organize environmental protection activities but lack initiative in participating in their organization.

Discussion and Conclusion

Descussion

This study shows students at Zhejiang Tourism College have high level pro-environmental awareness and motivation overall, but disparities and issues exist. The mean values of Awareness (3.80), Motivation (3.75) and Behavior (3.84) show a progressive relationship, indicating Awareness and Motivation are positively correlated with Behavior. Higher awareness and motivation lead to better - behaved students. This aligns with Li et al. (2019, pp. 28 - 23), Barszcz et al. (2023, pp. 89-104) as well as Zeng et al. (2023, p.1), who stating awareness impacts pro - environmental behavior assessment and motivation affects environmental interaction.



Conclusion

This study concludes that targeted educational interventions are necessary to enhance students' environmental awareness and motivation, thereby promoting sustainable practices within higher education institutions. By addressing the identified disparities and issues, it is possible to bridge the gap between awareness and behavior, ultimately contributing to the development of a more environmentally conscious student population in the field of tourism and supporting the sustainable development goals of Zhejiang Province.

Suggestion

- 1) Optimize Curriculum: Enrich environmental courses with topics like climate change and ecosystem protection. Add practical courses to enhance students' problem-solving skills.
- 2) Strengthen Promotion: Use campus media and club activities to spread environmental concepts and success stories. Hold themed events to boost students' sense of responsibility.
- 3) Diversify Activities: Design varied activities and strengthen school-community cooperation to involve students in community environmental practices.

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Developing Value Leadership Strategies for School Management in Liaoning Province, The People's Republic of China

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Abstract

A structured questionnaire was employed to examine 368 school administrators from basic education institutions in Liaoning Province, China. The aim was to determine the key components of value leadership in school management. The research instrument was a five-point Likert-scale questionnaire, demonstrating a high-reliability score of 0.98. The mean value and standard deviation were employed for statistical analysis. This study identified the components of value leadership for managers of basic education schools in Liaoning Province, China, including nine first-level indicators and forty-five second-level indicators. Nine key indicators were identified in the value leadership model for basic education school managers in Liaoning Province, China. Of these, principals' value practices received the highest recognition, closely followed by their ability to integrate values. Forty-five secondary indicators also have a high recognition degree 2. The highest one is the personal demonstration and practice of the school leaders, which makes the school values more convincing and the members of the organization are willing to accept them. Secondly, the principal can stand on the right value standpoint to integrate the values.

Keyword: basic education, value leadership, school administrators



Introduction

Basic education is the foundation of the national education system, and the establishment of a high-quality education system. Liaoning Province has 4,421 primary and middle schools, 2,455 primary schools, 1,532 middle schools and 434 middle schools. Liaoning has pledged basic education by 2035, and the overall strength and service capacity of education have been significantly improved. In order to realize the modernization of basic education by 2035, researchers have taken a keen interest in the performance of basic education schools in Liaoning, China, from the perspective of the current situation and importance of education. To provide appropriate leadership strategies for further effective and effective education management.

Objective

Research on the value leadership conditions for the performance of basic education schools in Liaoning Province of the People's Republic of China.

Research Methodology

Population and Samples

The subjects of the study were 4,421 administrators of basic education schools in Liaoning Province, China. The sample consisted of 368 elementary education school administrators from all over Liaoning Province. A multi-staged random sampling method was used, referring to Krejcie & Morgan (1970, pp. 607-610) for sample sizes dtermination.

Research tools

A two-section questionnaire was utilized as the research instrument

Part One: General information about the respondents, data was collected through a list-style questionnaire.

Part Two: The components of value leadership of elementary education school administrators in Liaoning Province, China. The data were collected by a five-point scale. In this study, Cronbach's Alpha coefficient was used to test the reliability of the entire questionnaire on the principal's value leadership to test the internal consistency of the scale. The overall Cronbach' α coefficient of the scale was 0.98, indicating that the reliability was very good.



Data analysis

The statistical indicators of quantitative data analysis are percentage, mean, standard deviation and validity index, while qualitative data is analyzed by content analysis. The data were presented in tabular form, and the significance of the mean was as follows:

4.51 to 5.00 has the highest recognition Recognition from 3.51 to 4.50 is higher 2.51 to 3.50 has medium recognition A low recognition rating of 1.51 to 2.50 1.00 to 1.50 has the lowest recognition.

Results

1) Indicators of school administrators' recognition of principals' value recognition ability.

Table 1

Mean and standard deviation of school administrators' recognition of principals' value recognition ability.

Components	\overline{x}	S.D.	Level	Rankings
1. Principals are able to identify the underlying values				
and their sources that govern the attitudes and				
behaviors of teachers and students	4.79	0.48	Highest	3
2. The principal can explain and define the values of				
the school in detail	4.78	0.50	Highest	2
3. Principals actively support teachers and students in				
understanding and embracing the values upheld by the				
school.	4.78	0.50	Highest	1
4. The school culture construction of our school has				
distinct characteristics, conforms to the school values,				
and ADAPTS to the development of the school	4.79	0.45	Highest	4



Components	\overline{x}	S.D.	Level	Rankings
5. The school has a harmonious interpersonal				
relationship, showing the characteristics of democracy,				
trust and openness	4.79	0.43	Highest	5

As can be seen from Table 1, school administrators have a high degree of recognition for the value recognition ability of principals. Among them, "the principal is able to identify the values and their sources that are implied to play a dominant role in the ideas and behaviors of teachers and students" has the highest recognition degree (\bar{x} =4.79).

2) Indicators of school administrators' recognition of principals' value leadership.

Table 2

Mean and standard deviation of school administrators' recognition of principals' value leadership.

0.40	Highest Highest	2 5
0.54	Highest	5
0.54	Highest	5
0.54	Highest	5
0.34	rignest	3
0.40	Highest	1
0.45	Highest	3
	0.45	0.45 Highest



Commonanta		S.D.	Level	Danleinaa
Components	x	ა.ט.	Level	Rankings
5. The principal's understanding and value pursuit				
of education can be transformed into the common	4.76	0.46	Highest	4
value pursuit of teachers and students				

As can be seen from Table 2, school administrators all have a high degree of recognition for the principal's value leadership. Among them, "the principal pays attention to guiding the values of teachers and students through the common vision of the school" has the highest recognition (\bar{x} =4.83).

3) Indicators of school administrators' recognition of the principal's value defense.

Table 3:

The mean and standard deviation of school administrators' recognition of the principal's value defense.

Components	\overline{x}	S.D.	Level	Rankings
1.Principals are able and adept at defending the values espoused by themselves or the school organization	4.79	0.47	Highest	4
2. The principal effectively assist teachers, students and				
staff fully understand and recognize the rationality and	4.82	0.40	Highest	2
legitimacy of the school's organizational value				
3.In the process of value leadership, the president has a				
firm determination and can ensure the intensity and	4.79	0.48	Highest	4
permanence of actions				
4. The principal's values are reflected in his own	4.02	0.42	TT: 1 .	2
behavior and interpersonal interactions	4.82	0.42	Highest	2
5. The principal possesses a clear understanding of the				
school motto, ethos, teaching ethos, and the school	4.83	0.42	Highest	1
values embodied by the school				



According to Table 3, school administrators have a high degree of recognition for the value defense of principals. Among them, "the principal has a clear understanding of the school motto, school spirit, teaching style and school values embodied by the school" has the highest recognition (\bar{x} =4.83).

4) Indicators of school administrators' approval of principals' value integration.

Table 4:

Mean and standard deviation of school administrators' approval of principals' value integration.

Components	\overline{x}	S.D.	Level	Rankings
1. The principal can guide the principal to establish a				
basic value consensus while respecting the diversity	4.81	0.43	Highest	3
of values				
2. Organize teachers, students, parents, alumni and				
other stakeholders to actively participate in	4.83	0.43	Highest	2
discussions to form school values				
3. The principal integrates the value from the right	4.84	0.38	Highogt	1
value standpoint	4.84	0.38	Highest	1
4. In complex situations, principals can think and				
analyze problems from the perspective of common	4.81	.42	Highogt	3
values of the school, and can effectively solve	4.01	.42	Highest	3
problems				
5. The school engages with retired teachers and				
reviews historical records to preserve and clarify the	4.62	0.67	Highest	5
school's cultural heritage.				

According to Table 4, school administrators have a high degree of recognition for the value integration of principals. Among them, "the principal can stand on the right value standpoint to integrate the value" has the highest recognition degree (\bar{x} =4.84).

5) Indicators of school administrators' approval of principals' value integration.



Table 5:

The mean value and standard deviation of school administrators' recognition of principals' value practice ability.

Components	\overline{x}	S.D.	Level	Rankings
1. Personal demonstration and practice by school	4.85	0.38	Highest	1
leaders make school values more convincing and				
organization members are willing to accept them				
2. School values are reflected in the institution's	4.83	0.43	Highest	2
philosophy, systems, behaviors, and even its				
environmental design.				
3. The school has a teacher development organization	4.74	0.48	Highest	5
established based on professional promotion, which				
reflects the school's value leadership, so that the				
professional development of teachers can be				
satisfied to the greatest extent				
4. The principal fosters a holistic education concept,	4.80	0.44	Highest	3
designing courses and activities with compassion,				
and guiding students to learn joyfully and grow				
healthily				
5. Parents have a high degree of satisfaction and	4.75	0.48	Highest	4
recognition of the school's values, school-running				
characteristics and teaching quality				

As can be seen from Table 5, school administrators have a high degree of recognition of the principal's value and practical ability. Among them, "The personal demonstration and practical actions of school leaders make school values more convincing and organization members are willing to accept them" has the highest recognition degree (\bar{x} =4.85).



Discussion and Conclusion

1) In this sample survey, the highest degree of recognition is given to "The principal can stand on the right value standpoint to integrate the value" has the highest recognition (\bar{x} =4.84). This is consistent with the scholar's view (2022:1-10), that is, value force means that leaders practice their true values in their work by clearly expressing their vision.

2) In this sample survey, the highest degree of recognition was given to "the demonstration and practice of school leaders make school values more convincing and the members of the organization are willing to accept them" (\bar{x} =4.85). This is consistent with Zhang Lei (2021:04) point of view, that is, value leadership refers to the process of consciously applying the core values of the organization to guide, integrate and standardize the values of individual members of the organization.

3) In this sample survey, "the leadership of school running vitality of the president" has the highest recognition degree (\bar{x} =4.84). which is consistent with Zhang Dapeng, Sun Xinbo (2017:09), that is, vitality is an important indicator to judge whether a school is a good school. The characteristics of a dynamic school include diversity, autonomy and creativity.

Suggestion

1. Researchers should consider creating a comprehensive activity guide for promoting value leadership among managers of basic education schools in Liaoning Province, China. This guide could be distributed to school management departments to enhance the effectiveness of value leadership practices.

2. Collaboration with industry training organizations could enable researchers to design specialized training courses for managers of basic education schools. These programs should focus on enhancing value leadership skills and promoting effective leadership practices.

3. Researchers may conduct surveys targeting education administrators to gather insights into their perceptions of basic education school management. These findings could inform the continuous improvement and periodic updates of the activity guide.



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An Error Analysis of English Compositions Written by Grade 12 Students

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Abstract

Despite years of studying English, students continue to make mistakes in their writing. The purposes of this study were: 1) To categorize the types of errors in English compositions written by grade 12 students and 2) To examine the causes of errors in English compositions written by grade 12 students. The subjects chosen for this study were 38 grade 12 students from one class who have already attended the Fundamental English Course in the second semester of academic year 2024 by using cluster random sampling technique. In this study, a composition from ten subjects served as the data collection method. In 60 minutes, the students produced a single composition of at least 100 words. The sample compositions were collected and the errors were categorized by using the scheme of error classification adapted from Dulay et al. (1982). After categorizing, all types of errors were analyzed to find their causes according to the scheme developed by Richard (1971; cited in Ellis, 1995: 59) and Norish (1983). The findings of this research could be summarized as follows:

- 1. The students committed mistakes in the three primary areas of errors in grammar, lexicon, and syntax. Grammatical mistakes were found to be the most common, followed by lexical and syntactic errors, in that order.
- 2. False hypotheses were the first three primary reasons for writing errors, followed by a lack of awareness of the rule restrictions and an incomplete application of rules, in that order.

The results indicate that while teaching writing, English teachers should place a greater emphasis on grammar than ever before, in addition to vocabulary and syntax. It is imperative that teachers provide and use textbooks and teaching materials that focus on explaining the differences between Thai and English in a way that is appropriate for the students' learning capacities. This



will help the students better understand the similarities and differences between the two languages, according to the primary cause of writing errors.

Keyword: Writing errors, error analysis, causes of error, English compositions, grade 12 students

Introduction

English has become the universal language between speakers whose native languages are different from each other. It is the most widely used language for communication in the world, especially, in terms of business, politics, tourism, the media, and the educational system. (Harmer. 2001). These figures make it likely that English has the largest number of non-native users of any world's languages. Crystal (1997) states that about 90% of published articles are written in English. Further, it is used in global communications, international business, sciences and technology, and social and cultural affairs. Most academic materials (80-90%) are written in English. Also, around 80% of information on the internet is written in the using English language (McCrum, Cran, & MacNeil. 1992). Moreover, it is expected that English language will be continuously increasing its significance as an international language all through the twentieth century and into the next century (Yano. 2001).

In Thailand, English is considered as a foreign language. It plays an important role in Thai educational system. With regard to Thai education, English is promoted and required in all levels: primary, secondary, and university. Therefore, it is now necessary that Thai students must have good basic skills of English, namely, listening, speaking, reading and writing in order to succeed professionally in the current modern and civilized world. In addition, English is crucial for students when learning and communicating with others in the school and in the wider world, and it is fundamental to learning in all subjects. Students must develop their English language abilities in all four skills in order to express themselves creatively and imaginatively and to communicate with others confidently and effectively. Nevertheless, the teaching of English in the country has faced a lot of problems. For instance, although after having studied English for several years, most students still cannot use it efficiently in real-life situations. The present teaching techniques have been substantially altered from the past; that is, the purpose has shifted from focusing on literature toward practical use (Khaourai. 2002). Therefore, skills are highlighted: listening, speaking,



reading, and writing. However, Heaton (1975) stated that it is generally accepted that of the four skills, writing is more difficult than listening, reading, and speaking.

Writing in English by Thai students has become increasingly important in school education. Students are required to complete a variety of writing tasks and assignments, such as, short stories, reports, compositions, and description writing projects. Writing tasks are concerned with reordering words and sentences, sentence completion, and error correction (Kongpetch. 2006). Students commit errors largely because their language proficiency is not good enough for them to use this language at will. In order to fill the gap between inadequate proficiency and the tough requirements of a language task, students draw on different strategies, such as ignorance and avoidance, mother tongue transference, incomplete rule application, and overgeneralization in their interlanguage forms, all of which cause different errors (He. 2002). In foreign language learning, error correction has become one of the most important teaching processes (Fang. 2007). When teachers require students to write a composition or an essay, it is important to point out the errors and mistakes they have committed after the compositions have been checked. By doing this, students can correct themselves and improve their language learning ability.

Corder (1967) states that error analysis is a type of linguistic analysis that focuses on the errors learners make. It consists of a comparison between the errors made in the target language (TL) and that TL itself. It is a useful approach theoretically and practically. It enables the teacher to understand students' learning process of the second language so that the result will be used to correct errors and improve skills of the students (Corder. 1981). It is beneficial not only to help students acquire better skills but also for teachers to improve their teaching styles and materials. This could contribute to a better quality of teaching and higher possibility of success. Moreover, error analysis can be used as a guideline for a curriculum and material planning as well.

While English has been included in Thai educational systems for several years, Thai students still face difficulty in the use of English, especially in writing, which may be the common problem among non-native speakers. Writing is frequently feared by students due to their fear of making mistakes. From the primary level to university level, English courses are necessary for the academic English curriculum. Even after taking English classes for a long time, it is discovered that the students are unable to communicate in the language. Both teachers and students may encounter this type of failure in their English studies.



As an English teacher, the researcher is well aware of the fact that Thai students at the secondary school level commit a lot of errors in essay. These students have been studying English for many years and still, their errors are numerous. Even students of Sirindhorn school studying English as a foreign language (EFL), most of them tend to communicate to each other using their native tongue and other dialects, even in English class. So, they tend to make errors and mistakes from interference between their first language-Thai- and their target language- English-particularly in English writing. This phenomenon becomes one of the major obstacles in learning the English language. Nevertheless, it is found that the students cannot communicate in English. This failure in studying English can be experienced by teachers as well as students. Hence, the researcher has decided to conduct an error analysis-a good tool for describing and explaining errors made by speakers of other languages (Johanson. 1975) - in order to know the types of these errors and the reasons behind their occurrence.

Thus, the purposes of this study will examine the types and the causes of errors from compositions written by Thai grade 12 students of Sirindhorn school, Surin province. Some grammatical problems in the acquisition of English language will be investigated. By analyzing errors committed by the students, the result of this study has led to find out what their dominant errors are and at which stage their English levels stay at when quantitative analysis of the distribution, the occurrences of errors from different aspects are analyzed. Their knowledge of English will be reflected in their compositions. And also, there are a few researches conducted on composition errors in Thai EFL learners. For the reason, the researcher chooses to analyze "writing composition errors" of grade 12 students of Sirindhorn School, Surin. The result of this study will be advantageous for teachers who teach English for EFL students, especially at the secondary school level, as it will reveal insights into the students' English knowledge and learning capability to develop writing skills; the teachers of English can use the results of this research when considering textbooks and teaching materials appropriate to the learning capacities of the students and it would be advantageous for future students because as their teachers have a better understanding of problems in writing skill, they can remedy students' problems more effectively.



Objectives

In accordance with the stated problems, the objectives of this research are as follows:

- 1) To categorize the types of errors in English compositions written by grade 12 students and
- 2) To examine the causes of errors in English compositions written by grade 12 students.

Research Methodology

This research is designed to analyze errors in English compositions written by grade 12 students, Sirindhorn School in the second semester of academic year 2024. The samples for quantitative data are 38 writing compositions produced by 38 students from grade 12 students who are studying the Fundamental English Course in the second semester of academic year 2024. The total number of the writings is 38 pieces of writings selected by using cluster random sampling technique. The samples for qualitative data are 10 grade 12 students: 5 students who have the highest scores of errors and 5 students who have the lowest scores of errors. There are two major instruments employed for this research in order to collect the data. They are writing test and interview.

The data was collected from grade 12 students of Sirindhorn School, Surin Province. The researcher starts to collect the data during the period of January – February 2025. The data will be collected by the researcher herself. The researcher requires students to do the writing test within 60 minutes. They are not allowed to use dictionary, cellphone or other electric devices to assist them in the writing test.

For semi-structured interview, the researcher interviews students. First, the researcher scores all writing tests of the grade 12 students from Sirindhorn School in order to find 10 students who get high scores and low scores in their writing test. The researcher interviews students by asking face to face. Each student is given 10 minutes to answer the questions.

Result

The findings of this research could be summarized as follows:

1. The students committed mistakes in the three primary areas of errors in grammar, lexicon, and syntax. Grammatical mistakes were found to be the most common, followed by lexical and syntactic errors, in that order.



2. False hypotheses were the first three primary reasons for writing errors, followed by a lack of awareness of the rule restrictions and an incomplete application of rules, in that order.

Conclusion

The results indicate that while teaching writing, English teachers should place a greater emphasis on grammar than ever before, in addition to vocabulary and syntax. It is imperative that teachers provide and use textbooks and teaching materials that focus on explaining the differences between Thai and English in a way that is appropriate for the students' learning capacities. This will help the students better understand the similarities and differences between the two languages, according to the primary cause of writing errors. In conclusion, the findings will be as a guideline for teachers and students in developing and improving their writing skills based on the error analysis and error correction.

Suggestion

In order to compare the students' English proficiency levels across various schools and then modify lessons and teaching/learning materials to better support students' acquisition of the English language, error analysis in other schools should be carried out. Both the number of students and the number of compositions used in this study were somewhat minimal. As a result, the findings drawn may not be entirely definitive. The additional research ought to set the standard for future studies that involve a larger student population.

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Conditions of administration of student development activities to promote desired characteristics of students in affiliated schools Surin Provincial Primary Educational Service Area Office

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Abstract

This research aimed to: 1) examine the current and desired states of student development activity management to promote desirable characteristics among students in affiliated schools under the Surin Primary Educational Service Area Office, and 2) identify the essential needs for managing student development activities to enhance desirable student attributes in these schools. A mixed-method research approach was employed. Quantitative data were collected from a sample of 265 educational institutions under the Surin Primary Educational Service Area Office using a questionnaire. The analysis of essential needs was conducted using the PNI modified technique. The research findings revealed that:

1. The opinions of the school administrators and teachers responsible for student development activities in schools under the Surin Primary Educational Service Area Office perceived the current state of student development activity management for promoting desirable student characteristics as moderate overall and across all dimensions. The dimensions were ranked in descending order based on their mean scores as follows: 1) management of social and public service activities, 2) management of student activities, and 3) management of guidance activities. In contrast, the desired state of student development activity management was perceived as very high overall and across all dimensions, with the following ranking: 1) management of guidance activities, 2) management of social and public service activities, and 3) management of student activities.



2. The PNI modified index indicated that the essential needs for managing student development activities to promote desirable student characteristics in schools were ranked as follows: 1) management of student activities, 2) management of guidance activities, and 3) management of social and public service activities.

Keyword: student development activity, desired characteristics

Introduction

The student development activity is the activity with the various techniques. It is to develop student skills in many aspects which are physical, mental, intelligent, emotional and social. The purposes of the activity are to create the strength, awareness, morality, self-understanding, good examples, potentiality for livelihood, responsibility and lifelong learning without credits or academic score. The activities include 1) the activity of counsel 2) the activity of student development and 3) the activity of social and public.

The Ministry of Education defined the desired characteristics as a scope of learning and teaching in a school. There are eight desired characteristics which are 1) Love of nation, religion and the monarchy, 2) Honesty and integrity, 3) Self-discipline, 4) Avidity for learning, 5) Applying principles of Sufficiency Economy Philosophy in one's way of life, 6) Dedication and commitment to work, 7) Cherishing Thai nationalism, 8) Public-mindedness. Teachers have to create the understanding of the student development principles and creative activities, allow the students to know and develop themselves through the various activities and promote the correct guidance to enhance the efficiency of student development (The Ministry of Education 2008:12-13)

From the background, the researcher is interested in the study of the administration of student development activities to promote desired characteristics of students in affiliated schools Surin Provincial Primary Educational Service Area Office to implement the finding of the research to be the development guidelines of the administration of the student development activity efficiently. The findings are beneficial to the school directors to create more efficient student development activity which is corresponding to the National Education Act 1989 and the student development activity of the Basic Education Core Curriculum 2008 and so on.



Objective

- To study the current conditions and the desired conditions of the administration of the student development activities to promote the desired characteristics of students in affiliated Schools Surin Provincial Primary Educational Service Area Office
- 2. To study the needs of the administration of the student development activities to promote the desired characteristics of students in affiliated schools Surin Provincial Primary Educational Service Area Office

Methodology

1. population and sample

The population of this research were 868 school directors in Surin Provincial Primary Educational Service Area Office. The researcher sampled by Krejcie-Morgan-Table and there were 265 samples in total.

2. Collective data instrument

2.1 Instrument

The instrument used was a questionnaire which includes the general information, the checklist and the study of current and desired conditions of the student development activities in affiliated schools Surin Provincial Primary Educational Service Area Office

2.2 Data collection

- 1) The researcher asked for a certificate from the office of Graduate studies, Buriram Rajabhat university, sending to the school directors in affiliated schools Surin Provincial Primary Educational Service Area Office for answering the questionnaire and collecting data.
- 2) The researcher distributed the questionnaire to the school director of sample group and set a returning date.
 - 3) The researcher collected the questionnaire by own.

2.3 Statistics and data analysis

1) The data analysis instruments of the study of the current and desired conditions of the student development activities to promote the desired characteristics of students in affiliated schools Surin Provincial Primary Educational Service Area Office were Mean and S.D. presented as a table with the description



2) analyze index PNI $_{\rm modified}$ of the needs of the administration of the student development activities to promote the desired characteristics of students in affiliated schools Surin Provincial Primary Educational Service Area Office

Result

The research on the administration of the student development activities to promote the desired characteristics of students in affiliated schools Surin Provincial Primary Educational Service Area Office was presented in 2 parts of the data analysis as follow

part 1 the current conditions and the desired conditions of the student development activities to promote the desired characteristics of students in affiliated schools Surin Provincial Primary Educational Service Area Office were analyzed by Mean and S.D. from the questionnaire. The result of the data analyzed was shown in the table 1-3

Table 1

Mean and S.D. of the current conditions and desired conditions of the Counsel activities in affiliated schools Surin Provincial Primary Educational Service Area Office.

	Current condition					Ι	Desired c	Desired condition				
Title	\bar{x}	S.D.	level	Rank		\bar{x}	S.D.	level	Rank			
1. policy and guidelines	3.196	0.866	moderated	2		4.160	0.524	highest	4			
2. Supervision	3.184	0.813	moderated	3		4.589	0.533	highest	3			
3. promotion	3.181	0.861	moderated	4		4.643	0.544	highest	1			
4. Evaluation	3.221	0.847	moderated	1	<u> </u>	4.601	0.522	highest	2			



	Current condition				Desired condition				
Title	\bar{x}	S.D.	level	Rank		\bar{x}	S.D.	level	Rank
Mean	3.196	0.847	moderated			4.498	0.531	highest	

From the table 1 found that The current condition of the administration of counsel to promote the desired characteristics of the student overall was in the moderated; the desired condition was in the highest level. When considering for each segment found that the current condition of the evaluation segment was the highest by mean (\bar{x} = 3.221, S.D. = 0.847) with moderated level and the desired condition was in the 2nd place by mean (\bar{x} = 4.601, S.D. = 0.552) with the highest level. The policy and guidelines of the current condition was inferior to the evaluation segment by mean (\bar{x} = 3.196, S.D. = 0.866) with moderated level and the desired condition was the 4th place by mean (\bar{x} = 4.160, S.D. = 0.524) with the highest level. The current condition of the supervision was in the 3rd place by mean (\bar{x} = 3.184, S.D. = 0.813) with the highest level. The desired condition was in the 3rd (\bar{x} = 4.589, S.D. = 0.533) with the highest level. The current condition of the promotion was in 4th (\bar{x} = 3.181, S.D. = 0.861) with the moderated level and the desired condition has the highest by mean (\bar{x} = 4.643, S.D. = 0.544) with the highest level.

Table 2

Mean and S.D. of the current conditions and desired conditions of The student activities in affiliated schools Surin Provincial Primary Educational Service Area Office.

	Current conditions				Desired conditions				
Title	\bar{x}	S.D.	level	rank	\bar{x}	S.D.	level	Rank	
1. policy and guidelines	3.267	0.893	moderated	2	4.618	0.507	highest	2	



	C	Current conditions					esired co	ndition	S
Title	\bar{x}	S.D.	level	rank		\bar{x}	S.D.	level	Rank
2. Supervision	3.241	0.826	moderated	3		4.587	0.524	highest	4
3. Promotion	3.194	0.890	moderated	4		4.648	0.509	highest	1
4. Evaluation	3.282	0.850	moderated	1		4.607	0.526	highest	3
Mean	3.246	0.865	moderat			4.615	0.517	highest	

From the table 2 found that the current conditions of The student development activities in affiliated schools Surin Provincial Primary Educational Service Area Office, overall was in the moderated and the desired conditions was in the highest level. When considering for each segment found that the current condition of the evaluation segment was the highest by mean $(\bar{x}=3.282, \text{S.D.}=0.850)$ with the moderated level and the desired condition was in the 3rd place by mean $(\bar{x}=4.607, \text{S.D.}=0.526)$ with the highest level. The policy and guidelines of the current conditions was inferior by mean $(\bar{x}=3.267, \text{S.D.}=0.893)$ with the moderated level and the desired condition was in the 2nd place by mean $(\bar{x}=4.618, \text{S.D.}=0.507)$ with the highest level. The current condition of supervision was in the 3rd place by mean $(\bar{x}=3.241, \text{S.D.}=0.826)$ with the moderated level and the desired condition was in the 4th place by mean $(\bar{x}=4.587, \text{S.D.}=0.524)$ with highest level. The current condition of promotion was in the 4th place by mean $(\bar{x}=3.194, \text{S.D.}=0.890)$ with the moderated level and the desired condition has the highest by mean $(\bar{x}=4.648, \text{S.D.}=0.509)$ with the highest level.



Table 3

Mean and S.D. of the current conditions and desired conditions of The Social and public activity in affiliated schools Provincial Primary Educational Service Area Office

	C	Current conditions					Desired conditions				
Title	\bar{x}	S.D.	level	rank		\bar{x}	S.D.	level	Rank		
1. Policy and guidelines	3.278	0.887	moderated	2		4.615	0.511	highest	3		
2. Supervision	3.711	0.725	moderated	1		4.610	0.469	highest	4		
3. Promotion	3.192	0.889	moderate	4		4.647	0.509	highest	1		
4. Evaluation	3.266	0.888	moderate	3		4.635	0.504	highest	2		
Mean	3.362	0.847	moderated			4.627	0.498	highest			

From the table 3 found that the current condition of Social Development and Administration Surin Provincial Primary Educational Service Area Office, overall was in the moderated and the desired conditions was in the highest level When considering for each segment found that the current condition of supervision has the highest by mean (\bar{x} = 3.711, S.D. = 0.725) with moderated level and the desired condition was in the 4th place by mean (\bar{x} = 4.610, S.D. = 0.469) with the highest level. The current condition of policy and guidelines was second highest by mean (\bar{x} = 3.278, S.D. = 0.887) with moderated level and the desired condition was in the 3rd place by mean (\bar{x} = 4.615, S.D. = 0.511) with the highest level. the current condition of evaluation was in the 3rd place by mean (\bar{x} = 3.266, S.D. = 0.888) with the moderated level and the desired condition was in the 2rd place by mean (\bar{x} = 4.635, S.D. = 0.504) with the highest level. The current condition of



promotion terms was in the 4th place by mean (\bar{x} = 3.192, S.D. = 0.889) with moderated level and the desired condition has the highest by mean (\bar{x} = 4.647, S.D. = 0.509) with the highest level.

Part 2 Necessary desire of managing students' development activities to promote the desired students of school under the Educational Service Area Office, the results of the study are as follows on Table 4

Table 4

The results of Necessary desire of managing student's development activities to promote the desire students of school Surin Provincial Primary Educational Service Area Office

	Current conditions			sired litions	Needs/Demand		
Title	\bar{x}	S.D.	\bar{x}	S.D.	PNI modified	ลำดับ	
1. Managing student activities to promote desirable characteristics	3.246	0.865	4.615	0.517	0.421	1	
2. Guiding activity management and promoting desirable characteristics	3.196	0.847	4.498	0.531	0.407	2	
3. Management of social and public interest activities to promote desirable characteristics	3.362	0.847	4.627	0.498	0.376	3	

Discussion and Conclusion

From this research, the main points in the study are the current conditions and the desired conditions of Administration of student development activities to promote desired characteristics of students in affiliated schools Surin Provincial Primary Educational Service Area Office the researcher discussed the results as follow.

The current conditions of Administration of student development activities to promote desired characteristics of students in affiliated schools Surin Provincial Primary Educational



Service Area Office, overall was in the moderated level, both of Social Development and Administration and Activities of students, it appears that the management of student development activities to promote the desired characteristics of students in schools under the Surin Provincial Primary Educational Service Area Office is still at an unsatisfactory level. The management of learner development activities has not been successful in administration. Considering each side, we will find that the promotional side of the event has the lowest average value. However, educational institutions should give more importance to promoting and supporting student development activities in order for student development activities to be successfully implemented according to the objectives, which is consistent with the research of Krits Chanthawong (2010) and they found that there are a large number of budget shortages in senior high school student affairs management in Wachirawit School (high school) Chiang Mai province.

The desired conditions of Administration of student development activities to promote desired characteristics of students in affiliated schools Surin Provincial Primary Educational Service Area Office, overall was in the highest level, indicates that expectations in the management of student development activities to promote their desirable characteristics in schools, Surin Provincial Primary Education District Office is also the highest expectations. Especially in terms of promotional support, there is a state of interest at the highest level. Because it is considered that the implementation of every activity will be successful and achieve the objectives, the executives or related agencies should provide sufficient support, both in terms of budget, materials, and equipment, as well as providing advice and consultation in organizing the activities.

Suggestion

- 1. Should study the problems of student development activity management in terms of promotion and support of educational institutions in order to make student development activity management more effective.
- 2. Should study the guidelines for determining strategies in student development activity management of educational institutions.



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Pragmatic Competence in English for Hotel Business: Needs Analysis from the Stakeholders

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Abstract

Pragmatic competence is the ability to use language effectively in different social and cultural situations. To determine learners' specific requirements, needs analysis is the initial step. This study aimed 1) to analyze Thai tertiary students' needs on English language skills and learning preferences on pragmatic competence in English for Hotel Business and 2) to investigate speech acts and the challenges faced by hotel personnel in using English language functions pragmatically. The participants were 75 Thai tertiary students and 75 hotel personnel. They were selected by using a purposive sampling technique. The research instruments were two needs analysis questionnaires on pragmatic competence for students and hotel personnel. The data were collected by using frequency, percentage, mean, and standard deviation. The findings showed that Thai tertiary students need English language skills at a high level, and speaking skill was at the highest mean score. Furthermore, simulation tasks ranked the highest preferences of task-based activities. Additionally, the most speech acts employed by hotel personnel were thanking, greeting, and welcoming hotel guests and leave-taking. However, dealing with guest complaints had the highest mean score among challenges speech acts faced. This study has significant implications for English language instruction, curriculum design, and professional training in the hotel industry context.

Keyword: English for Hotel Business, Needs Analysis, Pragmatic Competence, Stakeholders



Introduction

Needs analysis

Needs analysis is an essential step in curriculum design. It determines learners' specific requirements to bridge the gap between existing skills and target competencies (Dudley-Evans & St. John, 1998). It includes analyzing target situations, learners' lacks, and wants (Macalister & Nation, 2011). Furthermore, needs analysis is a fundamental component in developing specialized English programs, particularly in the hotel business. Dudley-Evans and St. John (1998) describe needs analysis as identifying and prioritizing learners' linguistic and professional needs, which directly inform curriculum design and instructional materials. In the hotel industry, where effective communication is critical, a comprehensive needs analysis identifies the specific language functions required, such as welcoming guests, handling complaints, and providing information about services (Prachanant, 2015). This ensures that language instruction aligns with the operational realities of the hospitality sector. Yamin (2021) found that hotel staff prioritized speaking and listening skills, with specific emphasis on tasks such as giving information, answering questions, and managing complaints.

Pragmatic competence

Pragmatic competence is essential for effective communication and encompasses skills such as interpreting speech acts, managing politeness, and adapting language to different cultural and social settings (Grice, 1975; Levinson, 1983). As a result, hotel staff should be able to use language appropriately in social and cultural contexts. The nature of human communication extends beyond the literal meanings of words, which involves the interpretation of implied intentions and social nuances (Taghizadeh, 2017). This ability is referred to as pragmatic competence. In the hotel industry, pragmatic competence is critical for delivering exceptional customer service and fostering positive guest interactions (Ladhari & Ladhari, 2018). Hotel staff must be adept at interpreting and responding to verbal and nonverbal cues, managing politeness, and understanding cultural differences to enhance guest satisfaction (Gudykunst & Kim, 2017). In teaching English for specific purposes, enhancing pragmatic competence helps learners navigate real-world interactions effectively (Zhang et al., 2019). Also, in second-language learning, understanding and using appropriate speech acts are vital for effective communication, particularly in contexts requiring interactions such as hospitality (Brock & Nagasaka, 2005).



Speech acts

A speech act is an utterance that performs an action rather than simply conveying information. Speech acts are derived from Austin's (1962) and Searle's (1969) foundational work and categorized into three components: locutionary acts (the act of saying something), illocutionary acts (the intended meaning or force behind the statement), and perlocutionary acts (the effect the utterance has on the listener). Illocutionary acts, such as requests, offers, apologies, and suggestions, are particularly relevant in hospitality. Searle's (1976) classification identifies illocutionary acts into representatives, directives, commissives, expressive, and declarations, which provides a framework for analyzing the linguistic functions performed by hotel staff. Directives such as requests and instructions are prevalent, as staff often guide guests, provide recommendations, or ask for clarifications (Prachanant, 2015). Similarly, expressive such as apologies, thanks, and welcomes are critical in establishing rapport and maintaining a polite and professional tone during guest interactions (Zhang et al., 2019). For example, a front desk clerk might apologize for a delay in room availability or thank guests for their patience, demonstrating cultural sensitivity and enhancing the overall service experience. Additionally, speech acts such as welcoming, apologizing, advising, and offering assistance are integral to the hotel business. The ability to use these acts effectively hinges on both linguistic proficiency and an understanding of contextual and cultural nuances. By focusing on speech acts, English language training for hospitality professionals can better prepare staff for guest communication's dynamic and interactive nature.

Task-Based Language Teaching and activities

Task-Based Language Teaching (TBLT) is a well-established approach that emphasizes authentic language use by engaging learners in real-world tasks (Xue, 2022). It fosters communicative competence by encouraging meaningful interaction, reflecting how language is naturally used beyond the classroom (Wang, 2022). There were some examples of tasks used in various task-based learning studies in English classrooms. Sae-Ong (2010) and Sun (2016) incorporated role-playing tasks, such as ordering food or checking into a hotel, to simulate real-life scenarios and enhance communication skills in practical contexts. Hardianti (2021) and Kruthangka (2019) applied information-gap activities to encourage interaction and collaboration in English learning to require students to exchange information, such as completing puzzles or



describing objects. Moreover, Kruthangka (2019) employed listening and note-taking tasks for identifying specific details and improving listening comprehension.

Teaching pragmatic competence in English for hotel business presents unique challenges. Effective instruction must integrate explicit teaching methods and contextualized tasks to enhance learners' ability to apply pragmatic rules in real-world scenarios (Kasper & Rose, 2002). Roleplaying, video analysis, and explicit instruction on speech acts are among the techniques that can be used to develop students' skills in this area (Bardovi-Harlig & Mahan-Taylor, 2003).

Research Objectives

- 1. To analyze Thai tertiary students' needs on English language skills and learning preferences on pragmatic competence in English for Hotel Business
- 2. To investigate speech acts and the challenges faced by hotel personnel in using English language functions pragmatically

Research Methodology

This study was survey research. The target group was stakeholders, which included 75 Thai tertiary students who were selected purposively by registering for the English for Hotel Business course and 75 hotel personnel who were also selected purposively from hotels where students are interned, and alumni are employed. The research instruments were the two questionnaires: 1) needs analysis on pragmatic competence in English for Hotel Business for Thai tertiary students, and 2) needs analysis on pragmatic competence in English for Hotel Business for hotel personnel. Five English-language and teaching experts examined the questionnaire's validity, and they then analyzed the Index of Item-Objective Congruence (IOC) at 0.74. The data were collected by using online questionnaires on Google Forms and the data were then analyzed using frequency, percentage, mean, and standard deviation. The opinion's meanings were determined on a five-rating scale as follows:

5	means	the highest need/ challenges
4	means	a high need/ challenges
3	means	a moderate need/ challenges
2	means	low need/ challenges
1	means	the lowest need/ challenges



The scores from the opinions about needs on pragmatic competence and challenges faced in using English language functions pragmatically were interpreted using the criteria below (Bringula et al., 2012).

Mean Range	Interpretation		
4.51-5.00	The highest level		
3.51-4.50	High level		
2.51-3.50	Moderate level		
1.51-2.50	Low level		
1.00-1.50	The lowest level		

Results

The present study's primary goals were to achieve two objectives. First, the study attempted to examine Thai tertiary students' needs on English language skills and learning preferences on pragmatic competence. Second, this study focused on investigating speech acts and the challenges faced by hotel personnel in using English language functions pragmatically. The findings are explained as follows:

1. Thai Tertiary Students' Needs on English Language Skills and Learning Preferences on Pragmatic Competence in English for Hotel Business

This part presents Thai tertiary students' needs on English language skills and learning preferences on pragmatic competence in English for Hotel Business. The details are illustrated in the following tables.

Table 1

Demographic Information of the Participants

Gender	Frequency (f)	Percentage (%)
1. Male students	19	25.00
2. Female students	56	75.00
Total	75	100.00



Table 1 presents the demographic information of the participants. It is shown that there were 19 males (25%) and 56 females (75%).

Table 2

Level of Needs on English Language Skills

English Language Skills	\overline{x}	S.D.	Level of Needs
1. Listening	4.45	0.70	High need
2. Speaking	4.47	0.78	High need
3. Reading	4.25	0.74	High need
4. Writing	4.17	0.94	High need
5. Vocabulary	4.41	0.77	High need
6. Grammar	4.12	1.06	High need
Total	4.31	0.83	High need

Table 2 describes the level of needs on English language skills. It reveals that the level of needs on English language skills in overall was found at a high level ($\bar{x} = 4.31$, S.D. = 0.83). It can be seen that speaking skill was shown the highest mean score among all language skills ($\bar{x} = 4.47$, S.D. = 0.78), followed by listening skill ($\bar{x} = 4.45$, S.D. = 0.70), and vocabulary ($\bar{x} = 4.41$, S.D. = 0.77), respectively. However, the least need found was grammar ($\bar{x} = 4.12$, S.D. = 1.06).



Table 3

Preferences of Task-based Activities to Enhance Pragmatic Competence in English for Hotel

Business

There a CT and A selection		n = 75		
Type of Task-based Activities	f	%	Rank	
1. Information-gap tasks (e.g., filling in missing map details)	43	53.33	4	
2. Opinion-gap tasks (e.g., debating the pros and cons of hotel technology)	27	36.00	8	
3. Decision-making tasks (e.g., choosing services within a guest's budget)	34	45.33	5	
4. Jigsaw tasks (e.g., assembling stories from separate pieces of information)	25	33.33	10	
5. Role-reversal tasks (e.g., switching roles between staff and guests)	48	64.00	2	
6. Surveys and interview tasks (e.g., conducting satisfaction surveys)	17	22.67	12	
7. Reasoning-gap tasks (e.g., solving puzzles or analyzing scenarios)	26	34.67	9	
8. Problem-solving tasks (e.g., handling power outages in the hotel)	44	58.67	3	
9. Narrative/Storytelling tasks (e.g., narrating a picture sequence)	29	38.67	7	
10. Discussion tasks (e.g., discussions about number of guests decreases)	23	30.67	11	
11. Simulation Tasks (e.g., handling guest dissatisfaction scenarios)	54	72.00	1	
12. Project-based tasks (e.g., creating a marketing plan for a hotel)	34	45.33	5	

Table 3 describes the preferences of task-based activities to enhance pragmatic competence in English for Hotel Business. It shows that simulation tasks ranked the highest (f=54, 72.00%), followed by role-reversal tasks (f=48, 64.00%) and problem-solving tasks (f=44, 58.67%), respectively. Nonetheless, surveys and interview tasks (f=17, 22.67%) were found at the least.



2. Hotel Personnel's Speech Acts and Challenges Faced in Using English Language Functions Pragmatically

This part introduces the English language functions, especially speech acts employed by hotel personnel in hotel operations, and the challenges faced by hotel personnel in using English pragmatically. The details are demonstrated below.

Table 4

Demographic Information of the Participants

Participants' Information	Frequency (f)	Percentage (%)
Gender		
1. Male hotel personnel	20	26.70
2. Female hotel personnel	55	73.30
Total	75	100.00
Working position		
1. Hotel staff	38	50.67
2. Hotel student trainees	37	49.33
Total	75	100.00

Table 4 presents the demographic information of the participants. It is shown that there were 20 males (26.70%) and 55 females (73.30%). 38 participants were hotel staff (50.67%), while 37 participants were hotel student trainees (49.33%).



Table 5
Speech Acts Employed by Hotel Personnel in Hotel Operations

Type of Speech Acts Employed	Frequency of Used (n=75)											
	Always		Usually		Often		Sometimes		Rarely		Never	
	f	%	f	%	f	%	f	%	f	%	f	%
1. Greeting and welcoming hotel guests	50	66.67	18	24.00	5	6.67	2	2.67	0	0.00	0	0.00
2. Explaining hotel policies and procedures	27	36.00	18	24.00	17	22.67	7	9.33	5	6.67	1	1.33
3. Handling guest inquiries and requests	28	37.33	23	30.67	13	17.33	4	5.33	5	6.67	2	2.67
4. Offering assistance and services	27	36.00	21	28.00	10	13.33	12	16.00	3	4.00	2	2.67
5. Dealing with guest complaints	28	37.33	20	26.67	12	16.00	7	9.33	3	4.00	5	6.67
6. Informing about hotel facilities and services	37	49.33	21	28.00	10	13.33	6	8.00	1	1.33	0	0.00
7. Requesting permission	39	52.00	11	14.67	14	18.67	6	8.00	2	2.67	3	4.00
8. Refusing something	28	37.33	20	26.67	14	18.67	8	10.67	4	5.33	1	1.33
9. Making suggestions	27	36.00	14	18.67	13	17.33	10	13.33	7	9.33	4	5.33
10. Saying an apology	36	48.00	17	22.67	8	10.67	7	9.33	3	4.00	4	5.33
11. Thanking	51	68.00	14	18.67	6	8.00	4	5.33	0	0.00	0	0.00
12. Leave-taking	50	66.67	15	20.00	8	10.67	2	2.67	0	0.00	0	0.00

Table 5 explains the English language functions as speech acts employed by hotel personnel in hotel operations. It states that the majority of speech acts used were thanking, greeting, and welcoming hotel guests, and leave-taking.

Table 6

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Challenges Faced by Hotel Personnel in Using Speech Acts

Type of Challenge Speech Acts Faced	\overline{x}	S.D.	Interpretation
1. Greeting and welcoming hotel guests	2.62	1.47	Moderate level
2. Explaining hotel policies and procedures	2.75	1.28	Moderate level
3. Handling guest inquiries and requests	2.89	1.25	Moderate level
4. Offering assistance and services	2.59	1.37	Moderate level
5. Dealing with guest complaints	2.95	1.26	Moderate level
6. Informing about hotel facilities and services	2.78	1.38	Moderate level
7. Requesting permission	2.31	1.46	Low level
8. Refusing something	2.84	1.26	Moderate level
9. Making suggestions	2.57	1.39	Moderate level
10. Saying an apology	2.74	1.36	Moderate level
11. Thanking	2.57	1.54	Moderate level
12. Leave-taking	2.57	1.58	Moderate level
Total	2.68	1.38	Moderate level

Table 6 illustrates the challenges faced by hotel personnel in using English pragmatically, especially speech acts. It reveals that dealing with guest complaints had the highest mean score among all speech acts ($\bar{x} = 2.95$, S.D. = 1.26), followed by handling guest inquiries and requests ($\bar{x} = 2.89$, S.D. = 1.25) and refusing something ($\bar{x} = 2.84$, S.D. = 1.26), respectively. However, the least mean score found was Requesting permission ($\bar{x} = 2.31$, S.D. = 1.46).



Discussion and Conclusion

The results revealed a high level of need for all English language skills, with speaking receiving the highest mean score. Speaking skills highlight the critical importance of verbal communication in the hotel business, where staff frequently interact with guests (Prachanant, 2015; Yamin, 2021). Listening and vocabulary also reflect the necessity for clear understanding and precise word choice in hospitality contexts, which align with the importance of linguistic proficiency identified by Dudley-Evans and St. John (1998). In teaching and learning English, simulation tasks, role-reversal tasks, and problem-solving tasks were effective task-based activities that simulated real-life hotel scenarios. These findings are consistent with Wang (2022), who emphasizes the role of task-based learning in fostering communicative competence by encouraging meaningful interaction, reflecting how language is naturally used beyond the classroom.

Moreover, the speech acts commonly used, such as thanking, greeting, welcoming guests, and leave-taking, underscore the importance of polite and culturally appropriate exchanges for maintaining positive guest relations (Austin, 1962; Searle, 1969). However, challenges such as handling guest complaints, addressing inquiries, and refusing requests reveal the complexities of managing conflicts and delivering unfavorable news while maintaining professionalism and guest satisfaction. These align with findings by Zhang et al. (2019), who highlighted the importance of pragmatic competence in navigating culturally nuanced interactions effectively.

In conclusion, the findings emphasize the necessity for English language skills, particularly speaking and listening, to support effective communication in the hotel industry. Task-based activities, such as simulations and role-reversal tasks, provide practical methods to enhance pragmatic competence by replicating real-world scenarios. Speech acts, including thanking, greeting, and leave-taking, are vital for building rapport and understanding, while addressing guest complaints remains a significant challenge requiring targeted training. These speech act strategies align with the importance of equipping learners with the linguistic and cultural tools necessary to thrive in the hospitality industry.



Suggestions

1. Implications

English training for the hotel industry should focus on speaking and listening skills using task-based activities like simulations and role-plays. Explicit teaching of pragmatic competence and collaboration with the hospitality sector can enhance learning and align with industry needs.

2. Further Studies

Future research should explore the long-term impact of training and cultural influences on speech acts. Expansion of studies to other hospitality sectors and incorporating guest feedback can provide deeper insights into improving communication skills.

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Problematic Internet Use and Reading Motivation in Russian Middle School Students

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Abstract

The article examined the relationship between the motivation of recreational reading of middle school students of grades 5-9 and problematic Internet use. This research was based on the self-determination theory, which postulates three main types of motivation: autonomous, controlled and amotivation. We hypothesized that problematic Internet use can negatively affect the reading motivation, undermining autonomous motivation and/or supporting controlled motivation and amotivation. This idea was important for pedagogical practice because different types of motivation can affect reading engagement and reading literacy. This hypothesis was tested in our empirical study using correlation analysis and structural linear modeling on the sample of 210 Russian middle school students. The results showed the absence of a negative effect of problematic Internet use on autonomous reading motivation, but there was a significant association with unproductive controlled motivation and amotivation. We also revealed that there was an indirect effect of autonomous motivation on reading skills. Thus, the results suggest that motivation is important for reading engagement and reading skills but the effects of problematic Internet use on reading motivation are limited with increasing controlled motivation and amotivation.

Keyword: Reading motivation, Problematic Internet use, Middle school students, Reading skills, Autonomous motivation, Controlled motivation.



Introduction

The reading motivation is regarded as subjective reasons that encourage a person to read (Conradi et al., 2014; Schiefele et al., 2012). Within the framework of one of the most well-known approaches in the psychology of motivation, the self-determination theory (SDT), the various types of motivation may be described using the concepts of "autonomous" and "controlled" motivation (De Naeghel et al., 2012; Ryan & Deci, 2000). Autonomous motivation, associated with a sense of autonomous regulation, when the reasons for involvement in an activity are felt as personal, unrelated to external control, includes internal and identified motivation. The latter is considered as a productive type of external motivation, reflecting significant personal goals and values of a person, encouraging activities that do not provide immediate pleasure. Controlled motivation includes external motivation and introjected motivation. The latter includes the regulation of activities by internally transferred (introjected) goals and values perceived as to some extent alien (for example, introjected parental requirements and expectations). In addition, in the modern SDT, an amotivation state is also described as a lack of motivation for action, which may lead to absence of actions as such, or to formal participation in activity when their own motives are absent, and people just perform their duties. The reasons for amotivation may be related to the fact that a person does not appreciate any activity, does not feel competent in it, or does not expect it to bring the desired result (Ryan & Deci, 2000).

Empirical studies of the effects of motivation demonstrate that autonomous/intrinsic reading motivation is associated with a large amount of reading and better reading achievements, while controlled/extrinsic motivation has a minor or negative impact on the amount of reading and academic performance (McGeown et al., 2016; Schiefele et al., 2012). These findings confirm the theoretical ideas that autonomous motivation is the main motivational factor of productive activity (Ryan & Deci, 2000).

There is little data on the relationship between reading motivation and problematic Internet use. In a sample of Turkish students of the pedagogical department of the university, a negative correlation was found between the attitude to reading and addiction to modern technologies, including Internet (Gerez TaŞgın & TaŞgın, 2023). These data indicate that problematic Internet use may be associated with a decrease in autonomous reading motivation and



an increase in amotivation. The reason for this association may be the fact that the addiction to Internet activity displaces the desire to read books and magazines.

Objective

The purpose of the study is to test the hypothesis that problematic Internet use among middle school students is a possible cause of a decrease in productive (autonomous) reading motivation and an increase in unproductive (controlled) motivation and amotivation. The consequences of such negative effects on motivation may affect reading engagement and reading skills.

Research Methodology

The sample comprised 210 middle school students of grades from 5 to 9 in Biysk and rural areas of the Altai Krai and the Altai Republic. It included 59% of girls and 41% of boys, the average age of the respondents was M = 12.86, SD = 1.58.

To assess the recreational reading motivation the authors' Russian version of SRQ-Reading Motivation questionnaire was used (De Naeghel et al., 2012). In the confirmatory factor analysis (CFA), two-factor model, which includes factors of autonomous and controlled motivation, showed acceptable fit after including three covariances between items with similar wording: $\chi^2 = 232.08$; df = 115; p < 0.001; CFI = 0.924; TLI = 0.910; SRMR = 0.081; RMSEA = 0.070 (90% CI = [0.057, 0.083]); PCLOSE = 0.008; N = 210. Cronbach's alpha values were 0.94 and 0.81 for autonomous and controlled motivation respectively.

Since SRQ-Reading Motivation questionnaire does not allow to assess amotivation, we have compiled an appropriate scale including four statements, e.g.: "I don't read in my free time, because I don't see the point in it". The one-factor CFA model showed perfect fit: $\chi^2 = 0.35$; df = 2; p = 0.842; CFI = 1; TLI = 1; SRMR = 0.004; RMSEA = 0.000 (90% CI = [0.000, 0.077]); PCLOSE = 0.902; N = 210. Cronbach's alpha was high (0.90).

To assess problematic Internet use we used Russian version of GPIUS (Caplan, 2010), which includes five subscales: Preference for online social interaction (3 items), Mood Regulation (3 items), Cognitive preoccupation (3 items), Compulsive use (3 items), Negative consequences (2



items). These subscales were used as indicators of problematic Internet use factor in structure equation modelling. All alpha values for these subscales were higher than 0.68.

The reading engagement scale was compiled of four items on the bases of the other similar scale (Wang et al., 2020) to assess behavioral manifestations of reading motivation, expressed in the amount of materials read and time spent on reading. Cronbach's alpha was 0.77.

To estimate reading skills of middle school students we used a previously developed original task bank aimed at assessment of the reading literacy skills in Russian. At every grade level an age-appropriate set of tasks was used, and the obtained scores were standardized within the age group for subsequent analysis as a part of a general sample.

The data analysis was carried out using methods of descriptive statistics, correlation analysis, and structural linear modeling. Calculations were implemented in the statistical analysis environment R, structural linear modeling was carried out in the MPlus 8 program using the maximum likelihood method with robust estimation of standard errors (MLR). Significance of indirect effects was estimated using the bootstrap method with 5,000 resamples.

Results

The results of the correlation analysis (Table 1) showed the expected relationships between the measured variables.

 Table 1

 Descriptive statistics and correlations among study variables

Note: p < .05, p < .01, p < .01, p < .00, p = .01

	M	SD	1	2	3	4	5	6	8
1. Autonomous motivation	4.41	1.63	_						
2. Controlled motivation	3.00	1.14	.26***	_					
3. Amotivation	3.05	1.59	57***	.12	_				
4. Problematic Internet Use	2.81	1.06	10	.25***	.38***	_			
5. Reading engagement	2.38	.72	.57***	.06	46***	21**	_		
6. Reading skills	0	.99	.10	08	13	03	.18**	_	
8. Age (years old)	12.86	1.58	.06	21**	.02	.06	.12	01	_
9. Gender (0 — female;	_	_	14*	.09	.08	25***	09	05	17*
1 — male)									



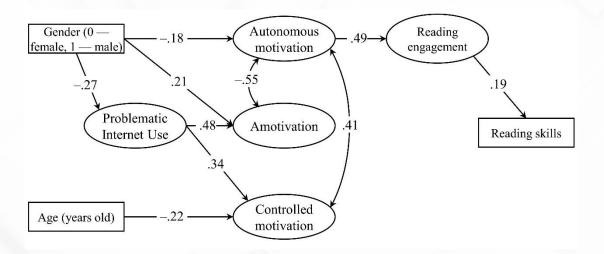
A positive significant correlation between autonomous motivation and controlled motivation was revealed, while the correlation between controlled motivation and amotivation was not significant. Autonomous motivation demonstrated significant negative correlation with amotivation. Autonomous motivation was also related to reading engagement. Its correlation with gender indicated a lower level of autonomous motivation in boys. Controlled motivation was significantly and positively correlated with problematic Internet use. At the same time, it was negatively related to age. Amotivation was also positively related to problematic Internet use, as well as negatively related to reading engagement and academic performance. Problematic Internet use showed a negative correlation with reading engagement, as well as a higher salience in girls. Reading engagement was positively correlated with reading skills and academic performance.

In accordance with the hypotheses put forward, a structure model was compiled in which autonomous motivation, controlled motivation and amotivation depended on problematic Internet use and influenced on reading engagement.

Figure 1

Structure model of relations among Problematic Internet use, reading motivation, reading engagement and reading skills controlling for gender and age

Note: all path coefficients are standardized and significant at $p \le .05$; residuals and insignificant paths are omitted for parsimony; N = 210.





The effects of all kinds of motivation on reading skills were also included in the model. To control gender and age, the corresponding variables were added to the model with their effects on all others. Covariances between all indicators of motivation were allowed. As in the measurement model, three covariances between indicators of reading motivation were also allowed. The estimation of this model (fig. 1) showed acceptable fit: $\chi^2 = 757.49$; df = 474; p < 0.001; CFI = 0.904; SRMR = 0.076; RMSEA = 0.053 (90% CI = [0.046, 0.060]); PCLOSE = 0.214; N = 210.

This model demonstrates that problematic Internet use is directly related to controlled motivation and amotivation, and the latter do not affect reading engagement and reading skills. At the same time, autonomous motivation, independent of problematic Internet use, has a significant effect on reading engagement. The presented model also demonstrates that boys have less autonomous motivation to read and higher amotivation. At the same time, girls showed higher problematic Internet use. Controlled reading motivation depends on age, decreasing as students get older.

Bootstrap-analysis showed that indirect effect of autonomous motivation on reading skills mediated through the reading engagement was statistically significant, but rather weak (c = 0.09; $p \le 0.05$). The indirect effect of gender on reading skills was not significant.

Discussion and Conclusion

The obtained results show that problematic Internet use among middle school students is not associated with the level of productive (autonomous) motivation to read, however, controlled motivation and amotivation are higher in children prone to Internet addiction (problematic Internet use). The results also confirm that autonomous motivation is essential for reading engagement and reading skills. These results do not contradict the data on the negative relation between the attitude to reading and dependence on modern technologies obtained in the study of Turkish students (Gerez TaŞgın & TaŞgın, 2023). According to our data, the amotivation reflecting the loss of the meaning of reading and unwillingness to read is more pronounced in adolescents with relatively high Internet addiction. However, the autonomous motivation associated with a positive attitude to reading did not show any relation to problematic Internet use.



The data obtained in our study on the greater propensity of girls to problematic Internet use are consistent with the data of some past studies (Procházka et al., 2021). Such gender differences may be also due to the fact that questionnaire of problematic Internet use captures more the typical for girls ways of using the Internet, e.g.: excessive communication on social networks, reading blogs, while boys are more likely to use the Internet for online games (Su et al., 2020). The limitations of the study are related to the use of a relatively small sample.

Suggestion

Taking into account the negative impact of problematic Internet use on reading motivation, it is important to develop some effective pedagogical and psychological interventions to prevent problematic Internet use and support interest in reading in middle school students.

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The study of the Current state, Desired state and Needs analysis of Multipliers of school

Administrators of Vocational Education Commission in The Northeast

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Abstract

The objectives of this research are 1) to study the current state and desired state and to assess the needs for the development of Multipliers of school administrators of Vocational Education Commission in the Northeast. The sample was 201 school administrators of Vocational Education Commission in the Northeast. The research instrument was a questionnaire with a discrimination of the actual state between 0.63-0.90 and a reliability coefficient of 0.99 and a discrimination of the desired state between 0.63-0.96 and a reliability coefficient of 0.99. The statistics used for analyzing the collected data were percentage, mean, standard deviation, and modified priority needs index (PNI). The results of this research showed that the current state and desired state of Multipliers of school administrators of Vocational Education Commission in the Northeast are as follows the current state of Multipliers of school administrators of Vocational Education Commission in the Northeast as overall a high level. The desired state of Multipliers of school administrators of Vocational Education Commission in the Northeast was rated as overall a high level. And the study on the Priority Needs Index of Multipliers of school administrators of Vocational Education Commission in the Northeast revealed that the aspects with a higher Priority Needs Index than the overall average were challenger and debater.

Keyword: Multipliers, School Administrators, Vocational Education



Introduction

Human resources are a vital catalyst for propelling the nation's growth in all aspects, aiming for the status of a developed country propelled by knowledge and innovation within the next two decades. Consequently, it is imperative to construct a methodical framework for the advancement of the nation's human resources. (National Strategy Secretariat Office, Office of the National Economic and Social Development Board, 2017) Education is pivotal tool for transforming individuals, developing societies, and promoting national progress. It is also the important tool for building a high-quality workforce capable of coexisting peacefully with other countries. In the face of fast worldwide change in the 21st century. Education is vital to strengthening a country's competitive edge and maintaining its global importance. (Office of the Permanent Secretary, Ministry of Education, 2023)

The current state in Thailand's educational administration shows that the majority of school administrators persist in using conventional bureaucratic methods, prioritizing rules, regulations, and directives more than leadership-oriented management. This dependence frequently diminishes organizational efficiency and people's performance effectiveness. In today's highly competitive society, administrators must possess leadership qualities that enable them to harness the full potential of individuals within their organizations. (Piradej Pacharapanyaporn, 2017) School administrators or educational institution leaders are among the most crucial personnel in schools, playing a pivotal role in ensuring the successful and comprehensive implementation of educational reform within the learning process (Phra Maha Sombun Suthammo, 2014,). Competency development is regarded as a vital tool for enhancing the capabilities of organizational personnel and leveraging these competencies to advance effective management. (Thammanoon Mitteywin and Amarin Parapibul, 2015) The Office of the Vocational Education Commission has been actively engaged in the production and development of human resources to meet the country's workforce demands and is committed to producing and enhancing vocational education personnel to ensure quality and standards. This aligns with the development of the economy and society, ultimately contributing to the nation's increased competitiveness. (Office of the Vocational Education Commission, 2023)

Therefore, a leader who enables an organization to achieve its goals and enhances the capabilities of collaborators through their practices, as exemplified by multiplier leadership, multipliers are genius makers. What we mean by that is that they make everyone around them smarter and more capable. Multipliers invoke each person's unique intelligence and create an atmosphere of genius



innovation, productive effort, and collective intelligence, consists of 1) magnet 2) liberator 3) challenger 4) debater 5) investor (Wiseman & McKeown, 2010)

Based on the aforementioned considerations, the researcher is interested in studying the current state, desired state and need analysis of Multipliers of school administrators of Vocational Education Commission in the Northeast in order to provide data for the future development of the quality of educational organizations.

Objective

- 1. To study the current state and desired state of Multipliers of school administrators of Vocational Education Commission in the Northeast.
- To assess the needs for the development of Multipliers of school administrators of Vocational Education Commission in the Northeast.

Research Methodology

1. Population and Sample

The population consisted of 519 school administrators from 127 institutions under the Office of the Vocational Education Commission in the Northeastern during the academic year 2024.

The sample group of the study were 201 school administrators from institutions affiliated with the Office of the Vocational Education Commission in the Northeastern for the academic year 2024. The sample size was determined with the table of Krejcie and Morgan (Krejcie & Morgan, 1970). And use the stratified random sampling method by using the type of college as strata and conducting simple random sampling to obtain the specified sample group.

2. Data Collection Tools

The research instrument utilized in this study was a questionnaire designed to assess the current and desired states of Multipliers of school Administrators of Vocational Education Commission in Northeast. The discrimination power of the questionnaire for the current state ranged from 0.63 to 0.90, with a reliability coefficient of 0.99. Similarly, the discrimination power of the questionnaire for the desired state ranged from 0.63 to 0.96, with a reliability coefficient of 0.99



3. Data Collection Methods

The data was collected using questionnaires. The researchers sent a survey to the sample group by using the AMS e-Office system and designing a questionnaire using Google Forms, with received feedback from a sample group of 201 people who were school administrators.

4. Data Analysis

For data analysis in this research, the researchers analyze the data as utilizing statistical measures such as the average, standard deviation, and the Modified Priority Need Index ($PNI_{modified}$). The researcher determined the criteria as follow (Srisa-ard, 2010)

4.51-5.00 means current state and desired state rated as the highest level

3.51-4.50 means current state and desired state rated as high level

2.51-3.50 means current state and desired state rated as moderate level

1.51-2.50 means current state and desired state rated as the less level

1.00-1.50 means current state and desired state rated as the least level

Results

Table 1.

The analysis results of the current state, desired state, and needs of Multipliers of school Administrators of Vocational Education Commission in the Northeast are as follows.

Multipliers of	The current state			desired state			- PNI	Ranking
school Administrators	\overline{x}	S.D.	Interpretation	\overline{x}	S.D.	Interpretation	Modified	of the
1. Magnet	3.77	0.63	High	4.39	0.56	High	0.16	2
2. Liberator	3.86	0.70	High	4.48	0.57	High	0.16	2
3. Challenger	3.78	0.70	High	4.44	0.59	High	0.17	1
4. Debater	3.80	0.69	High	4.45	0.57	High	0.17	1
5. Investor	3.96	0.65	High	4.54	0.54	Highest	0.14	3
Overall	3.84	0.63	High	4.46	0.53	High	0.16	



According to Table 1, the current state reveals that overall at a high level. When examining individual dimensions, the three highest mean scores are investor, liberator, and debater. Conversely, the dimension with the lowest mean score is magnet. The desired state reveals that overall at a high level. When examining individual dimensions, the three highest mean scores are investor, liberator, and debater. Conversely, the dimension with the lowest mean score is magnet. The results of the study of needs of Multipliers of school administrators of Vocational Education Commission in the Northeast. Ranked from most important of needs to least are challenger, debater, liberator, magnet, and investor.

Discussion and Conclusion

The current state of Multipliers of school Administrators of Vocational Education Commission in the Northeast, is overall at a high level. When analyzed by dimension, the three highest mean scores are investor, liberator, and debater. This may result from the administrators' emphasis on developing educational institutions by embodying leadership qualities that effectively promote organizational success. These findings underscore the administrators' ability to lead collaboratively, enhance personnel potential, and cultivate an organizational culture conducive to development. Notably, the three dimensions with the highest average scores. The results are aligned with the study of Yondonrenchin and Zanabaza (2023), which indicate that Multiplier leaders have a substantial and positive impact on employee job attitudes and engagement. It demonstrated that leaders who exhibit multiplier behaviors contribute to fostering positive job attitudes and increased levels of engagement among employees. Furthermore, the results of this study are consistent with Nattapong Kaewphooban (2023) which indicate that The actual state of multipliers leadership of school administrators under the Office of Udon Thani Primary Education Service Area was at a high level. Similarly, the findings resonate with those of Piradej Pacharapanyaporn (2017) studied about the multipliers leadership of school administrators in Chonburi province, under the Secondary Educational Service Area Office 18. which indicate was at high level. The desired state of Multipliers of school Administrators of Vocational Education Commission in Northeast was rated as high overall. This may be attributed to the expectations placed on administrators to effectively foster the potential and engagement of personnel in the development of their institutions. The results are aligned with Chaiya Phawabut (2022) who stated



that the role of administrators should encompass elements related to both tasks and people, reflecting an individual's capacity to achieve success. Such expression represents the interplay between the administrator's own perceptions and the expectations of others involved in the exercise of authority and responsibility. Sataporn Pruettikul (2017) found that multiplier leadership aims to "develop talent" and fully utilize the potential of talented individuals, thereby contributing to sustainable organizational development aligns with the current and future societal transformations, and consistent with the research of Nattapong Kaewphooban (2023) found that the expected state of multipliers leadership of school administrators under the Office of Udon Thani Primary Education Service Area was at the highest level. The study on the Priority Needs Index of Multipliers of school Administrators of Vocational Education Commission in the Northeast revealed that the aspects with a higher Priority Needs Index than the overall average were challenger and debater.

Suggestion

- 1. The research findings reveal that the dimension with the lowest mean score in the current state of Multipliers of school Administrators of Vocational Education Commission in the Northeast is magnet. Therefore, to enhance multiplier leadership, school administrators and stakeholders should develop strategies for recruiting and attracting talented personnel to the organization. This includes improving policies and benefits to motivate high-performing individuals and fostering an environment that encourages and supports them to fully express their potential.
- 2. The examination of the preferred condition indicates that investor stands foremost among the desirable aspects. Therefore, school administrators have to foster a sense of ownership by using participatory management concepts and decentralizing power to engage all stakeholders in organizational ownership. Furthermore, they must to acknowledge and celebrate accomplishments while enhancing the morale of educators and educational staff.
- 3. The analysis of the Multipliers of school Administrators of the Vocational Education Commission in the Northeast identifies investors as the top priority. School managers should establish ambitious objectives to enhance the competencies of teachers and educational staff. Strategies must encompass the establishment of ambitious and engaging objectives for educators and



personnel, motivating them, and cultivating an awareness of the collaborative advantages of attaining organizational goals.

- 4. Future study should encompass educational institutions in various locations or distinct educational organizations. This would allow comparisons of the patterns and developmental requirements of multiplier leadership across diverse areas or organizations with differing attributes.
- 5. Comprehensive research should be undertaken to assess the influence of cultivating multiplier leadership on organizational results. These may encompass student academic success, employee productivity, or stakeholder contentment within educational institutions. This research would yield extensive data that may be effectively utilized to improve organizational efficiency.

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Agile Leadership of School Administrators in the Digital Age

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Abstract

In the digital age of rapid change, agile leadership is gaining more attention, especially in the field of education. School administration is faced with rapidly changing challenges which use the principles of agile leadership. It can help school administrators be more flexible and adaptable. It emphasizes collaboration among everyone in the organization and continuous improvement. School administrators with agile leadership can use a planning approach that does not stick to traditional plans. They adjust their lesson plans based on information and feedback from teachers and students. They create a culture of teamwork and promote learning and innovation. Using digital technology in teaching is another important strategy for creating effective and modern teaching. Examples of the use of agile leadership in educational institutions in Thailand demonstrate continuous improvement in teaching and learning, promotion of collaboration, and continuous staff improvement. These strategies allow schools to adapt and respond effectively to the needs of students and teachers.

Keyword: Agile leadership, School administration, Collaboration, Continuous improvement

Introduction

In the digital age, digital technology plays a crucial role in every aspect of human life, including communication, education, work, and personal living. Advancements in technology, such as smartphones, artificial intelligence, high-speed internet, and big data analytics, have led to



rapid changes across multiple sectors. These changes significantly impact people's lifestyles and work environments, including education.

In this era, leaders with agile leadership capabilities are those who can create organizational change, adapt themselves and their teams swiftly, and maintain flexibility. They can drive appropriate changes at all organizational levels—operational, team, and executive (Saichuea, 2024). Agile leaders possess the skills to connect team members and all stakeholders, enhancing organizational efficiency. Furthermore, they have the ability to shift organizational mindsets, act as facilitators, and inspire others simultaneously. Agile leadership is akin to having a compass that guides everyone toward the correct destination (PSI Solutions, 2024).

The education sector is among those most affected by digital age transformations. The need to modernize teaching methods and school management to align with emerging technologies and current learners' needs is imperative. Agile leadership has become a vital tool enabling school administrators to respond effectively to these changes (Chulalongkorn University, 2 0 2 1; Thepsaeng et al., 2024). School administration in the digital era encounters various challenges, such as adapting to new technologies, maintaining quality teaching standards, meeting the expectations of learners and parents (Bligh et al., 2018), and managing resources efficiently. These rapid changes demand timely decision-making (Thammasat University Demonstration School, 2019). Hendrickson and Gordon (2020), and Niphapaphan (2021) noted that agile leadership principles empower school administrators to better adapt and respond to change. These principles involve using data and analysis to refine teaching methods, fostering teamwork to drive innovation, gathering feedback from personnel and learners, and engaging in continuous learning and development. Such practices enable schools to adapt swiftly and effectively to diverse challenges.

Definition of Agile Leadership

Numerous scholars have defined Agile Leadership as follows:

Agile leadership refers to a leadership style that is highly adaptable to the rapidly evolving digital world. Agile leaders are individuals who can connect all elements within an organization, driving it toward success. They are adept at building connections among team members, colleagues, and all stakeholders. Moreover, they have the ability to analyze future social



trends and anticipate appropriate actions in response to different scenarios (Hayward, 2018). Agile leaders inspire both the mindset of their team and the organizational environment, fostering creativity and innovation. They do not adhere rigidly to traditional methods but instead promote a culture of continuous learning, open communication, and empowerment. Their leadership style is characterized by a strong commitment to delivering value and achieving meaningful results, focusing on long-term strategies through incremental, measurable successes (Appelo, 2011). An agile leader understands that agility is not merely about speed but also about purposeful movement, guided by a deep understanding of team dynamics and the evolving needs of the organization. They emphasize the development of personnel and the creation of flexible systems to address the complexities of modern environments. Agile leaders balance flexibility with decisiveness, unlocking organizational potential during transformative periods. Their approach transcends traditional command-and-control management, embracing collaboration, empowerment, and adaptability—key to navigating today's dynamic landscapes (Huning et al., 2020).

In summary, agile leadership is vital for driving transformation and thriving in the digital age. Agile leaders possess a visionary outlook, unbound by conventional frameworks, and employ strategies to make decisions swiftly and effectively in unforeseen situations. They build quality teams, trust their members, and delegate tasks and authority while addressing obstacles to enhance team performance. By fostering an environment of freedom in thought and action, they create opportunities for continuous learning and effective teamwork. The result is a highly competent organization that delivers significant outcomes, guided by steadfast purpose and active execution. Agile leaders ensure the organization progresses in the right direction while achieving sustainable growth.

Principles of Agile Leadership

Conboy and Fitzgerald (2010) and Hendrickson and Gordon (2020) outlined several key principles of Agile Leadership that enable administrators to effectively adapt and respond to changes. The 7 principles emphasize flexibility, collaboration, and continuous improvement, as follows:



- 1. Flexibility refers to the ability to adapt and modify operational approaches based on emerging situations. Leaders must embrace change and avoid rigid adherence to traditional methods or plans. They should adjust strategies and management practices when expectations are not met or when new opportunities arise.
- **2. Collaboration** involves effective teamwork within the organization and engagement with all stakeholders. Leaders should cultivate a culture that promotes teamwork, idea sharing, and cooperation among teachers, students, parents, and the community. Broad participation enriches decision-making by incorporating diverse perspectives.
- 3. Leadership by Example means agile leaders lead by example by demonstrating flexibility, collaboration, and continuous improvement in their actions. They should be open to feedback and committed to self-improvement, inspiring others through their behavior.
- **4. Continuous Learning and Improvement** means agile leaders encourage and support ongoing learning and development for themselves and their team members. This includes providing training, workshops, and knowledge-sharing opportunities. They also foster a culture that values learning from mistakes and applying insights to improve processes.
- 5. Customer Focus, in the context of educational institutions, "customers" are students and their parents. Agile leaders prioritize understanding and addressing their needs and expectations. This could involve refining curricula and teaching methods to better align with students' interests and requirements.
- **6. Listening and Responding** means agile leaders actively listen to feedback and suggestions from personnel and stakeholders. They create open communication channels and foster trust, ensuring that they respond to input promptly and effectively.
- 7. Data-Driven Decision Making means agile leaders rely on data and analytics to inform decisions and refine processes. For example, they may use student performance data to adjust teaching methods or allocate resources effectively. Implementing a school management information system can help in collecting and analyzing relevant data.

Application of Agile Leadership in School Administration

Agile leadership can be effectively applied in educational institutions to enhance management efficiency and promote effective teaching and learning. Principles of agile leadership



empower administrators and teachers to remain flexible, adapt easily, and respond swiftly to changing needs. Below are practical applications of agile leadership in school administration (Department of Local Administration, 2019; Hayward, 2018).

- 1. Improving Work Processes means agile leadership principles can be used to refine internal work processes, such as implementing flexible lesson planning that adapts to different situations. Administrators can employ the Plan-Do-Check-Act (PDCA) cycle to evaluate and enhance teaching strategies. For example, periodic meetings can be held to review and adjust lesson plans based on student performance data.
- 2. Promoting Teamwork means cultivating a culture of collaboration is essential. Administrators should encourage teamwork by organizing team-building activities, regular team meetings, and using online collaboration tools like Google Workspace or Microsoft Teams. These platforms enable teachers to work together effectively, fostering shared ownership of teaching and administrative outcomes.
- 3. Data-Driven Decision Making means administrators can utilize data analysis to guide decisions, such as assessing student learning outcomes to improve teaching methods. A school management information system (SMIS) can help collect and analyze relevant data, supporting evidence-based decision-making.
- **4. Developing Personnel** means continuous professional development is critical. Administrators should organize training programs and development activities to enhance teachers' skills and knowledge. Examples include workshops on modern teaching technologies, digital tools, and innovative teaching methods.
- 5. Creating a Culture of Learning and Innovation means schools should foster an environment that encourages lifelong learning and innovation. Administrators can organize innovation contests, encourage the use of emerging technologies in teaching, and support research and development projects related to education.

Examples of Agile Leadership in Educational Institutions Abroad

In Sweden, several schools have effectively applied the principles of agile leadership in their administration, resulting in more flexible and responsive teaching and learning processes that



better address students' needs. The following are examples of how agile leadership principles have been implemented (Bligh et al., 2018; Conboy and Fitzgerald, 2010):

1. Improving Lesson Plans Based on Feedback from Teachers and Students

Application: Administrators in some Swedish schools collect data and feedback from teachers and students regarding teaching methods and course content through surveys, interviews, and workshops.

This information is then used to refine lesson plans, such as by adding or reducing content in the curriculum, adjusting teaching methods to better suit students, or experimenting with new teaching techniques.

2. Promoting Teamwork and Participation

Application: Schools foster teamwork among teachers, students, and parents by organizing regular joint meetings to exchange ideas and experiences. Teachers collaborate in planning and developing teaching methods tailored to students' needs. Involving all stakeholders ensures diverse perspectives, enriching the teaching process and addressing the varied needs of students more effectively.

3. Using the Continuous Improvement Cycle

Application: Schools adopt the Plan-Do-Check-Act (PDCA) cycle to improve teaching and administrative processes. For example, they plan new teaching strategies, implement them, evaluate the results, and make necessary adjustments based on the outcomes. This approach allows schools to adapt quickly and respond effectively to students' needs.

4. Integrating Technology into Teaching and Learning

Application: Schools incorporate digital technologies into teaching, such as using online learning platforms, digital teaching materials, and collaborative online tools. These technologies enhance the flexibility and adaptability of the learning process, providing students with a dynamic and interactive educational experience.

5. Fostering a Culture of Learning and Innovation

Application: Schools promote lifelong learning and innovation by organizing activities that encourage continuous learning, such as teaching innovation contests and research projects. Teachers and students are encouraged to use new technologies and innovative



educational methods. This culture supports schools in adapting to changes effectively and staying ahead in a dynamic educational landscape.

Examples of Agile Leadership in Educational Institutions in Thailand

In Thailand, many schools have started adopting agile leadership principles to enhance efficiency in teaching, learning, and resource management. The application of these principles enables schools to adapt more effectively and respond to the needs of students and teachers. The following examples highlight how agile leadership principles are implemented in Thai schools (Chulalongkorn University, 2021; Suankularb Wittayalai School, 2020):

1. Improving Lesson Plans Based on Feedback from Teachers and Students

Application: Some schools in Thailand have developed systems to collect data and feedback from teachers and students regarding teaching methods and course content. This information is used to refine lesson plans, such as updating curriculum content, tailoring teaching methods to specific student groups, and experimenting with innovative teaching strategies.

2. Promoting Teamwork and Participation

Application: Schools encourage teamwork among teachers, students, and parents by organizing joint meetings to exchange ideas and experiences. Collaborative groups are formed among teachers to plan and develop effective teaching methods. Additionally, schools organize activities that engage students in the learning process, fostering a sense of participation and collaboration.

3. Using Technology in Teaching and Learning

Application: Schools have integrated digital technologies into teaching and learning, such as using online learning platforms (e-learning platforms), digital teaching resources, and online collaborative tools. These technologies make teaching and learning more flexible and adaptable to changes, enhancing students' engagement and educational outcomes.

4. Developing Personnel

Application: Schools continuously organize training programs and professional development activities for teachers. Examples include workshops on modern teaching technologies, skill-building for using digital tools, and training on innovative teaching methods.



School administrators also encourage teachers to pursue self-improvement to stay updated with educational advancements.

5. Creating a Culture of Learning and Innovation

Application: Schools promote lifelong learning and the integration of innovation into teaching practices. Activities such as teaching innovation contests, support for research and development projects related to education, and the encouragement of students and teachers to use emerging technologies are common. This culture helps schools remain adaptive and relevant in a rapidly changing educational landscape.

Conclusion

Agile Leadership has become a highly relevant management approach in the digital age, particularly in the field of education. Educational institutions face rapidly changing and complex challenges, making the application of agile leadership principles essential for administrators to adapt effectively. Agile leadership fosters an environment that encourages collaboration and continuous development, which are key to meeting the needs of both students and teachers. This leadership style emphasizes flexibility in administrative approaches, allowing leaders to embrace and respond swiftly to change. Agile leaders have the capability to gather and utilize feedback from teachers and students to continuously refine teaching plans. Their decision-making is not confined to traditional plans but remains adaptable to address new challenges. Additionally, agile leaders focus on cultivating a culture of teamwork, encouraging collaboration at all levels, and supporting learning and innovation, particularly in the use of technology and modern teaching methods. By adopting agile leadership, school administrators can create dynamic and responsive educational environments that are well-equipped to navigate the complexities of the digital era while effectively addressing the evolving needs of learners and educators alike.

The fundamental principles of Agile Leadership include the following: 1) Flexibility, leaders must possess the ability to adapt and modify operational approaches when outcomes deviate from expectations or new opportunities arise. Flexibility enables leaders to navigate challenges and drive effective change in dynamic environments. 2) Collaboration, agile leaders must cultivate a culture that fosters collaboration among teams, teachers, students, parents, and the community. This inclusivity ensures that decision-making incorporates diverse perspectives,



leading to more comprehensive and effective outcomes. 3) Continuous Learning and Improvement, administrators must promote consistent learning and professional development within their organizations. Continuous improvement equips personnel with the skills and knowledge necessary to respond efficiently to evolving changes. 4) Data-Driven Decision Making, leaders must utilize data and analysis to make informed decisions and refine operational processes. For instance, using student performance data to enhance teaching strategies and manage resources more effectively ensures that decisions are evidence-based and impactful.

Therefore, Agile Leadership is a highly suitable approach for managing educational institutions in the digital age. With its emphasis on adaptability, continuous development, and collaboration, this leadership style enables administrators to foster an open and flexible organizational culture. Agile leadership equips school leaders to address challenges and respond swiftly to rapid changes in the educational landscape. By implementing these principles, administrators can create a culture that promotes teamwork and ongoing development, resulting in more effective and modern teaching practices. This approach ensures that educational institutions can effectively meet the evolving needs of both students and teachers, enhancing the overall quality of education.

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The Elements of Assets Management System for Universites in Guangxi, China

Wu Xiaoxiao, Kowat tesaputa and Thanyaporn Nualsing

Abstract

The purpose of this study was to investigate the elements of assets management system

for Universites in Guangxi, China. The research selected the elements with high frequency, this

paper synthesizes from 15 literatures and researches on the elements of assets management for

Universites. Research results was found 4 elements from as: 1) Comprehensive Asset

Management Plan;2) Technology Integration;3) Lifecycle Management;4) Human Capital

Development.

Keyword: Assets Management, Elements of Assets Management System

Introduction

The concept of asset management has been widely studied across various sectors,

including education, where the efficient management of resources is critical for institutional

success. Frederick Winslow Taylor's (1911) Scientific Management theory emphasizes the

importance of systematic planning and optimization in management practices, which directly

relates to the need for a Comprehensive Asset Management Plan in universities. Ludwig von

Bertalanffy's (1968) General System Theory provides a framework for understanding the

interrelated components of a system, such as the integration of technology and the management of

assets throughout their lifecycle. These classic theories offer foundational insights that are

essential for developing asset management in the educational context.



The rapid expansion of higher education in China over recent years has led to significant increases in the number and variety of assets managed by universities. This growth presents substantial challenges in asset management, particularly in the context of Guangxi, an autonomous region in southern China. Guangxi's universities, reflecting the region's unique socio-economic conditions, face specific challenges in managing their assets efficiently and effectively. Effective asset management is crucial for optimizing resource use, enhancing educational quality, and supporting the region's educational and strategic goals.

Asset management in higher education involves the systematic process of developing, operating, maintaining, and upgrading the physical assets of an institution. These assets include buildings, equipment, libraries, laboratories, and other educational resources. Efficient asset management ensures these resources are used optimally, maintained properly, and replaced or upgraded as necessary to support the institution's educational mission.

Effective asset management in universities is crucial for several reasons: 1) Proper asset management ensures resources are used efficiently, reducing waste and maximizing the utility of existing assets. This optimization is particularly important in a resource-constrained environment like Guangxi (Wang, 2015; Chen, 2021); 2) By maintaining assets in good condition and replacing them at the right time, universities can avoid costly emergency repairs and replacements. This proactive approach leads to significant cost savings over time (Roncalli, 2011; Fu, 2022); 3) Well-managed assets provide a better learning environment for students and faculty. Up-to-date facilities and equipment are essential for delivering high-quality education and supporting research activities (Istikhoroh & Ardhiani, 2022; Meng Hui et al., 2018); 4) Effective asset management provides data and insights that support strategic planning and decision-making. Universities can make informed choices about where to allocate resources and how to prioritize investments (Kaplan & Norton, 1996; Wang Xiuyan, 2024); and 5) Proper asset management ensures compliance with regulatory requirements and reduces the risk of penalties. It also helps manage risks related to asset failure or mismanagement (Varma, 2020; Zeng Qingpeng, 2023).

The existing literature highlights several key challenges in the asset management practices of universities in Guangxi: 1) Many universities still rely on traditional asset management practices that are not suited to the complexity and scale of modern higher education institutions. This reliance often leads to inefficiencies and resource wastage (Wang, 2015; Zeng Qingpeng,



2023); 2) There is a shortage of trained professionals specializing in asset management within the educational sector. This gap results in suboptimal management of assets and hinders the implementation of best practices (Wang Jialan, 2020; Yan Xiaoxing, 2021); 3) Despite the availability of advanced asset management technologies, their adoption in Guangxi universities is limited. This limitation hampers the ability to track, monitor, and optimize asset use effectively (Li Chaoping, 2019; Fu, 2022); 4) Financial constraints are a significant barrier to effective asset management. Limited budgets restrict the ability of universities to invest in necessary upgrades, maintenance, and new technologies (Chen, 2021; Meng Hui et al., 2018); 5) Universities must navigate complex regulatory frameworks that govern asset management. Ensuring compliance with these regulations while managing assets effectively adds an additional layer of complexity (Varma, 2020; Zeng Qingpeng, 2023); and 6) The asset management in Guangxi universities faces challenges similar to those encountered in other regions of China, but also has its unique regional issues (Wang Xiuyan, 2024; Fu, 2022).

Objectives

To investigate the elements of the assets management for universities in Guangxi, China.

Research Methodology

In order to achieve the purpose of the research, the investigate the elements of the assets management for Universities in Guangxi, China. The research selected several experts in the field and analyze the suitability of each element by questionnaire. As follow step:

- 1. Study of documents, textbooks, and research relevant to the Assets Management for Universities in Guangxi, China.
- 2. Synthesized data from 1 to obtain the elements of the Assets Management for Universities in Guangxi, China.
- 3. Examine the appropriateness of the elements of the Assets Management for Universities in Guangxi, China.7 Chinese experts by questionnaire.



Research Results

Elements of assets Management for Art Universites in Guangxi, People's Republic of China from documentary analysis as follow

The development of assets management for universities in Guangxi is of considerable significance both within the context of higher education in the similar region and in the broader practices field of asset management as follows:

The main content of assets Management:

Enhancing Resource Efficiency and Allocation

This research is significant as it provides a systematic approach to resource optimization, which is crucial in a region with constrained financial and material resources. The adoption of such a system can led to significant cost savings and better use of limited resources, supporting the long-term sustainability of educational institutions in Guangxi.

Supporting Strategic Planning and Institutional Development

An asset management system that is aligned with the strategic goals of universities can significantly enhance their capacity to plan and implement long-term development strategies. In the context of Guangxi, where universities are striving to improve their rankings and expand their influence, the integration of asset management into strategic planning is essential. This research underscores the importance of developing a comprehensive asset management plan that not only maintains the current assets but also anticipates future needs and aligns with the institution's strategic goals.

Promoting Stakeholder Engagement and Compliance

Asset management in universities involves multiple stakeholders, including university administrators, faculty, students, and external partners. Asset management requires the active engagement of these stakeholders to ensure that their needs and expectations are met. This research highlights the importance of stakeholder engagement in asset management practices, ensuring that decisions made are inclusive and reflective of the broader university community. Additionally, the research emphasizes the need for compliance with legal and regulatory standards, which is critical for maintaining the legitimacy and reputation of the institutions.



Advancing Technological Integration and Innovation

This research is significant as it advocates for the integration of these technologies into the asset management practices of Guangxi universities, which can lead to improved accuracy in asset tracking, enhanced maintenance scheduling, and better overall management efficiency. By embracing technological advancements, universities can not only improve their operational efficiency but also position themselves as leaders in innovation within the higher education sector.

Contributing to Sustainable Development

This research emphasizes the integration of sustainability principles into the asset management systems of Guangxi universities. By adopting practices that promote the efficient use of resources, reduce waste, and minimize environmental impact, universities can contribute to broader sustainability goals. This not only enhances their public image but also ensures that they are acting as responsible stewards of their resources for future generations.

To develop an asset management system for universities in Guangxi, a strategic framework is needed. The framework includes the following components: 1) Assessment and planning: Conduct a comprehensive assessment of current assets and management practices. Develop a strategic plan that outlines goals, priorities, and resource allocation (Wang, 2015; Chen, 2021); 2) Technology integration: Invest in digital tools and systems that support efficient asset management. Ensure these technologies are user-friendly and scalable (Li, 2019; Fu, 2022); 3) Professional Development: Build a team of trained professionals with expertise in asset management. Provide ongoing training and development opportunities to keep staff updated on best practices and new technologies (Wang Jialan, 2020; Yan, 2021); 4) Sustainability and Compliance: Incorporate sustainability principles into asset management practices. Ensure compliance with all relevant regulations and standards (Varma, 2020; Zeng, 2023); and 5) Continuous Improvement: Establish mechanisms for continuous monitoring and improvement. Use data and feedback to refine asset management practices and achieve better outcomes over time (Kaplan & Norton, 1996; Wang Xiuyan, 2024).



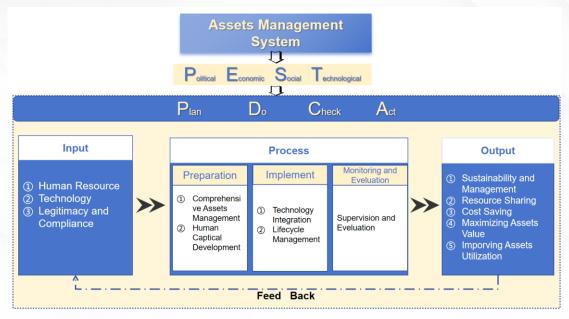


Diagram 1

Conclusion and Discussion

This literature review highlights the critical elements necessary for asset management system for universities in Guangxi, China. The review underscores the importance of a comprehensive asset management plan, the integration of technology, lifecycle management, and human capital development. However, it also identifies several research gaps, particularly in the context of Guangxi, that need to be addressed. Future research should focus on the practical implementation of these strategies in less developed regions, the specific challenges of technology adoption, and the development of effective human capital strategies to support asset management in universities. Addressing these gaps will not only contribute to the academic understanding of asset management but also provide practical solutions for improving the efficiency and sustainability of university operations in Guangxi and similar regions.

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Interplay between Beliefs and Pedagogical Practices among Cambodian EFL Private School Teachers in Phnom Penh

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Abstract

This paper is dedicated to exploring the deeply held beliefs of teachers regarding the integration of content and language within Cambodian EFL private school teachers. It also examines their corresponding instructional practices and the interrelationship between these beliefs and practices in the same educational environment. To probe these dimensions, this paper selected three teachers from an elementary private school in Phnom Penh City. The research methodology was comprehensive, involving one questionnaire, four detailed interviews, and two observation sessions for each teacher, conducted over a span of roughly two months. This multifaceted approach was designed to collect a rich dataset, facilitating a nuanced understanding of the educational dynamics at play. The simultaneous execution of data collection and analysis ensured efficiency and continuity in the research process, paving the way for immediate transition into the analysis phase. The paper found that the school-level environment plays a significant role, yet the individual and professional experiences of teachers also contribute substantially to shaping their diverse beliefs and instructional activities. Moreover, the interplay between beliefs and practices was consistently evidenced, reinforcing the need for their closer integration. The paper underlines vital implications for aiding teachers in developing professional instructional strategies in future immersion classroom structures and designs. Furthermore, it calls for additional research



supported by long-term professional development and institutional support, and advocates for a more comprehensive study across different grades and settings to build on these findings.

Keyword: Beliefs, Pedagogical Practices, Elementary Private School

Introduction

Teaching methods in language and subject knowledge that are based on teaching theories and beliefs must be used in bilingual education (Fang, 1996; García & Lin, 2017). Teachers have a significant impact on students' learning, even if parents, schools, and students all participate in the educational process (Schroedler & Grommes, 2019). Knowing how teachers' beliefs influence the pedagogical instruction they employ, how their actual practices influence specific teaching strategies, and how beliefs and instruction relate to one another in order to assess their coherence and alignment is therefore crucial.

According to educators, the foundation of their educational instruction is their beliefs (Ertmer, 2005; Suprayogi et al., 2017). The filter function of teacher beliefs was highlighted by a number of studies, such as those by Gilakjani and Sabouri (2017) and Williams and Burden (1997), which claimed that teacher beliefs are the result of practice, thinking, and experience following numerous screenings, redefinitions, distortions, and reshapings (Abdi & Asadi, 2015; Fang, 1996; Kyriakides et al., 2009; Williams & Burden, 1997). Every element of the classroom setting, including but not limited to practice design, strategy selection, and decision-making, is influenced by the beliefs of the teacher (Ma & Liu, 2023; Williams & Burden, 1997; Xu, 2012). In other words, because they influence how instructors perceive and apply their teaching philosophies, teacher beliefs function as the theoretical underpinnings of their instruction. Thus, in bilingual education, teacher beliefs influence language learning and instruction (Rietdijk et al., 2018).

Bilingual education's integration of language and content has been acknowledged for the past century. According to Dalton-Puffer (2011), Lo (2019), Snow et al. (1989), and others, language is a tool that humans use to interpret the world. It exemplifies the function of language in meaningful comprehension and efficient communication. The content also makes it easier for language learners to access a wider range of information for additional research. Language and



content must coexist because if one is neglected, the other becomes meaningless (Mohan, 1986; Snow et al., 1989). This was also the case for Byram and Wagner (2018), who supported the inclusion of language and intercultural communication materials in bilingual education.

The complexity of the Khmer language stems from the rich history of Cambodia with a mass of cultures, which increases the depth and challenge of Khmer language teaching (Mok, 2014; Hang, 2017; Lim, 2013). A range of teaching strategies are available in bilingual immersion education programs through multilingual pedagogies of subject and language teaching under content-based instruction (CBI). The need to promote effective teaching becomes imperative. The findings are expected to contribute valuable perspectives to the field of bilingual education, supporting educators, administrators, and policymakers in enhancing instructional quality and efficacy in diverse educational environments.

Research Objectives

The purposes of this paper were twofold:

- 1. To find out the Cambodian EFL teachers' beliefs, instructional practices, and the intricate relationships between teachers' beliefs and instructional practices in the Khmer immersion programs, specifically focusing on content and language teaching.
- 2. To determine how these beliefs influence teaching methods and to what extent these practices reflect or diverge from the teachers' stated ideologies.

Research Questions

Three ancillary questions for this paper are as follows:

- 1. What beliefs do Cambodian EFL teachers hold about integrating content and language in their instruction?
- 2. What are the pedagogical practices used to teach content and language in the Khmer immersion program classrooms?
- 3. What do Cambodian EFL teachers' instruction reflect about the teachers' beliefs regarding teaching content and language in the Khmer immersion program?



Delimitation and Limitation

Two main characteristics of this paper are its delimitations: the particular grades of the informants and its sole emphasis on Khmer immersion without the incorporation of other languages. The first is that the informants were all students at the same private school, specifically in kindergarten, second, and fifth grades. Because instructors of other crucial transitional and developmental periods are not included in this restricted sampling from only three grade levels, the analysis's potential across all elementary school grades is limited.

This paper was carried out exclusively in Khmer immersion programs that don't use any other languages. By limiting the paper to situations where Khmer is the only language of instruction, this focus ignores the potentially distinct dynamics found in multilingual immersion contexts. The findings' relevance to programs that use multiple languages concurrently in the curriculum may be impacted by this constraint.

Additionally, this paper's main drawback is that it only recruited informants from kindergarten, second, and fifth grade; teachers from all grade levels were not included. In order to fully comprehend instructional methods across the school and to enable a thorough cross-grade study, the initial goal was to involve instructors from every grade. A broader view of the school's teaching methods would have been possible with such an approach, which would have revealed insights into how various grade-level teachers blend language and subject.

Theoretical Framework

According to Bada and Olusegun (2015), constructivism is a theory of education that views instruction and learning as a process of action, reflection, and construction. Constructivism is viewed as a teaching and learning strategy that holds that information is reflected on experiences and that people understand knowledge through their experiences (Adom et al., 2016). Constructivism, according to Fosnot (2013), is a significant theory about the construction of learning and the acquisition of knowledge. Stated differently, constructivism is a well-known educational paradigm that places an emphasis on actively creating meaning and knowledge through interactions and experiences in the environment.



The development of constructivism has been greatly aided by a number of influential academics. The cognitive development hypothesis of Swiss psychologist Jean Piaget emphasizes how people actively explore and interact with their surroundings to build knowledge (Amineh & Asl, 2015; Brau, 2020; Oogarah-Pratap et al., 2020; Sjøberg, 2020). Piaget emphasized the importance of mental models or structures that people employ to arrange and understand data (Amineh & Asl, 2015; Sjøberg, 2020).

Constructivism highlights the importance of teachers in directing students' learning through instruction based on their views, in addition to helping to reflect how teacher beliefs impact pedagogical instruction in the private schools in Phnom Penh. Constructivism is therefore a good framework for this study, which aims to explore the teaching methods and teacher beliefs in the private schools in Phnom Penh.

Research Methodology

As previously stated, constructivism serves as the theoretical framework for this investigation. Because a portion of the study will examine the construction of interview data, it is consistent with qualitative methodology as a research paradigm (Merriam & Tisdell, 2016). Accordingly, this study was able to analyze teacher beliefs and behaviors in light of the informants' perspectives by employing this paradigm (Cohen et al., 2018). This investigation was employed a case study research approach, which is common in qualitative designs. According to Merriam (1998), a qualitative case study is a thorough and in-depth investigation and analysis of a specific phenomenon, such as a program, institution, person, process, or social unit, taking into account its completeness and context.

This paper was conducted in one elementary private school (School A) in Phnom Penh City, Cambodia. This paper used purposive sampling which was a non-probability sample method relying on particular characteristics or specific purpose to the study's goals. Three informants were carefully selected within private schools in Phnom following the criteria below: (1) Native Khmer speakers; (2) Active involvement in school trainings and curriculum; (3) Teaching Khmer as the language of instruction; (4) Be employed in a Private School in Phnom; and (5) Teach at the elementary level. This aims to capture a diverse range of experiences and perspectives across various grade levels within the elementary context.



To gain a comprehensive understanding of the case study, appropriate instrumentation methods are indispensable (Creswell, 2014). In this paper, the application of questionnaires, interviews and observations serves as the essential tools for gathering insights and information.

The data collection was organized into five phases. Throughout each phase, it maintained a formal and well-organized case study database. Each informant had an individual electronic folder comprising basic seven subfolders: one for a questionnaire, four for interviews, and two for observations. Additional folders are created as needed for any added information under the specific informant's labeled folder. The collected information was kept entirely confidential and securely stored on the researchers' password-protected laptop, ensuring exclusive access by the researchers alone. In addition, all data was submitted to a protected folder in Google Drive. This paper securely managed the data volume, by keeping the informants' names anonymous. Specifically, this paper developed a unique coding system to identify each informant. The document identifying the informants and their code was kept separate from all the data folders and the researchers have been the only with access to that document. The folders and all the data gathered were labeled using the specific code assigned to each informant.

This paper used a broad analytical approach that was founded on the "ground up" approach to data analysis proposed by Yin (2014). This "ground-up" approach was used by the researcher in an effort to carefully examine the data starting with its most basic components. With this approach, raw data points are thoroughly examined, enabling the development of relevant insights, consistent patterns, and basic ideas (Yin, 2014; Stake, 1995). The researchers can use this technique to turn seemingly unrelated or dispersed data into insightful and cohesive understandings within the paper, according to Yin (2014). Furthermore, the steps in the data analysis process — which include reviewing raw data, identifying patterns, and formulating generalizations — also correspond with Johnson and Christensen's (2019) viewpoints. Three analytical techniques — pattern matching, explanation building, and cross-informant synthesis — as well as Yin's (2014) general analytic strategy of "group up" guided the analysis and validation of this paper.



Research Results and Discussion

1. Results of the Research Question 1

Research question 1 was asked: "What beliefs do Cambodian EFL teachers hold about integrating content and language in their instruction?"

In this paper, it was discovered that three teachers were enthusiastic proponents of integrating content and language in their instruction. They frequently articulated beliefs like "I believe in the integration of content and language,". Two primary influences on these beliefs were found by the analysis. First of all, a school policy that established explicit expectations and standards for the integration of language and subject was followed by all of the teachers. As demonstrated by Pajares (1992), who pointed out that such policies might either facilitate or limit instructional choices, this institutional policy had a major influence on their attitudes. This supports the results that teachers' perceptions and practice of their teaching tactics were influenced by school regulations that not only encouraged but also mandated the integration of language and subject.

Interviews also revealed that these opinions were greatly influenced by individual teaching experiences. Teachers stated that the observed gains in student learning from combining language and subject were directly attributable to their pedagogical practices, which included techniques like pedagogical differentiation and self-reflection regarding courses. This facet of belief construction is consistent with the work of Jarvis (2004) and Borg (2001), who highlighted the importance of reflective practice and professional development in forming teaching strategies. The teachers in this paper developed successful integration techniques by drawing on their prior experiences and self-driven innovations in the lack of adequate institutional assistance.

Furthermore, teachers were forced to build their integration tactics on their own due to a lack of proper professional development. Notwithstanding these challenges, they implemented strategies they had previously learnt and kept improving them to increase their efficacy. The opinions of Barcelos and Ruohotie-Lyhty (2018) and Rahman et al. (2018), who characterize teacher beliefs as essential philosophies that significantly impact instructional actions, are supported by this practice of continuous modification. Similar to this, Eisenhart et al. (1988) show that teacher beliefs include extensive frameworks about classroom activities and knowledge usage.



This was demonstrated by the fact that instructors, in spite of little support, linked their pedagogical approaches with policy mandates.

A combination of following the required curriculum and making calculated adjustments to fit the particular requirements of their classes and student bodies was evident in each teacher's unique method of combining language and subject. This flexibility not only demonstrates the need for flexibility in immersion settings but also their distinctive contributions to teaching methods, highlighting the complex relationship between both individual pedagogical autonomy and institutional educational frameworks.

The dynamic interplay between institutional mandates and individual teacher initiatives in influencing educational practices is ultimately vividly depicted by this study, which has been enhanced by scholarly discussions. It emphasizes the necessity of regulations that not only require but also strongly encourage the integration of language and content, guaranteeing that educators are prepared to properly implement these policies in the classroom.

2. Results of the Research Question 2

Research question 2 was asked: "What are the pedagogical practices used to teach content and language in the Khmer immersion program classrooms?"

According to this paper, the way language and subject are integrated in Khmer immersion schools demonstrates a very flexible and sophisticated teaching style, which is defined by the variety of pedagogical techniques teachers use. These tactics are customized to meet the specific needs of each student as well as the teaching philosophies of the institution, in addition to the curriculum's requirements.

Using a curriculum that includes instructional support, video demonstrations, and experimental materials, all teachers followed the school policy requiring the integration of language and subject. Each instructor could begin from a similar baseline that encompassed training in both scientific disciplines and pertinent languages thanks to this systematic method, which offered a consistent basis across classes. Mathieu (2022), who emphasizes how various materials can effectively assist both topic acquisition and language learning, highlights the need of such specialized instructional support in modifying lessons to fit diverse learning requirements. This is consistent with the theoretical idea put forward by Argyris and Schön (1974), according to which the "theory in use" represents actual classroom practices that may deviate from the "theory



of action" or advocated tactics because of opportunities and challenges encountered in the real world.

Teachers demonstrated a great deal of liberty in applying a variety of activities that were tailored to their unique classroom environments and personal preferences, even beyond these prescribed components. Because younger kids are more likely to misbehave, lower grades, for example, required more classroom management techniques. Teacher K, for example, concentrated on making interesting, relatable links between language and subject to keep students' attention and improve learning. By using regular group discussions, Teacher 5 was able to take advantage of the older students' superior cognitive capacities and improve comprehension and engagement with more difficult and abstract content. This adaptability in teaching methods is supported by Tedick and Wesely (2015), who point out that by adjusting tactics to meet the demands of both students and policy requirements, learning results can be greatly improved.

The pluriliteracies approach to topic and language integrated learning is also highlighted by Meyer et al. (2015). This method is especially useful for charting learners' advancements in knowledge construction and meaning establishment. This theoretical framework backs up this paper's observation of various teaching approaches catered to the preferences of particular teachers. As an example, Teacher 2 favored using a "Question & Answer" methodology, which promotes active learning and provides immediate feedback. The employment of progressive introduction strategies, on the other hand, was preferred by Teachers K and 5. These techniques enabled a scaffolded approach to learning that improves students' comprehension and promotes strong advancement in both language acquisition and content mastery by progressively revealing new material. Personal pedagogical preferences can greatly influence educational practices, as seen by this variety in teaching techniques.

A dynamic and changing relationship between teacher beliefs and teaching instruction is highlighted by the combination of these useful tactics with the theoretical understandings of Argyris and Schön (1974). The "theory in use" frequently adjusts to the subtleties of real classroom dynamics and teacher preferences, even while the "theory of action" may be in line with institutional rules that support integration, as further examined in the case studies by Dubetz (2002) and Dubetz and Collett (2020). These studies demonstrate the significant impact that



individual experiences have on teaching methods, resulting in a dynamic interaction between beliefs and instruction over time.

In order to meet the various demands of students as well as the requirements of policies, educational systems must be flexible. This is highlighted by the dynamic blending of uniformity and customization in instructional techniques. The need for strong professional development and a better comprehension of the interaction between professed theories and real teaching practices in improving educational outcomes in Khmer immersion classrooms is highlighted by this analysis, which is enhanced by both theoretical discussions and practical observations.

3. Results of the Research Question 3

Research question 3 was asked: "What do Cambodian EFL teachers' instruction reflect about the teachers' beliefs regarding teaching content and language in the Khmer immersion program?"

The study of this paper revealed that the three teachers' similar ideas and methods of instruction interacted in a complex way. They primarily showed a high degree of consistency in converting their personal pedagogical views into classroom activities, indicating a significant match between their declared beliefs and their actual teaching approaches. According to Hashweh (1996), this was especially noteworthy even though the teachers were employed in a variety of grade levels, indicating a strong integration of belief systems into instructional strategies. The teacher highlights how strongly held epistemological ideas greatly influence educational approaches and how crucial it is to match these beliefs with instructional strategies in order to improve educational efficacy.

Nevertheless, in the observed classroom sessions, not all of the discussed views were evidently practiced. There are two main reasons for this disparity. First, some beliefs — like instructors' self-reflection — may be difficult to witness firsthand in a single class period since their expressions may be nuanced or situational. Heydarnejad et al. (2017) illustrate the nuances in belief manifestation by going into detail on how teachers' ideas about knowledge might shape their teaching approaches in ways that are not always obvious. Second, even though the teachers hold these views, it is possible that they weren't appropriate or applicable for the particular conditions of the courses that were observed, which is why they weren't used at the time. For example, Teacher K mentioned a change in her strategy for assigning students to groups



during the fourth interview. She first placed average and advanced students in the same groups. She did note, though, that the advanced pupils now understood the rationale behind this arrangement, which would cause the students to feel divided. Teacher K then made the decision to randomly allocate kids to groups for activities in an effort to promote a more inclusive atmosphere and avoid any negative effects.

This paper also identified situations in which the teachers used particular teaching techniques that did not directly support their professed values. As discussed by Hofer and Pintrich (1997), this raises the possibility that they unintentionally incorporated these techniques into their teaching repertory. They contend that, even when instructional tactics do not explicitly reflect teachers' professed values, beliefs frequently influence their selection in a subtle way. The complex dynamics it's observed in educational tactics are better explained by this theoretical viewpoint. Although at first not included in their stated beliefs, these tactics may have gradually become integrated into their teaching style, making it harder to distinguish between intentional practice and deeply rooted habit. A theoretical foundation for comprehending this evolution of teaching techniques is offered by Loong (1998), who proposes a move toward constructivist and more collaborative approaches. These observations, which show how peer interactions may eventually impact and even change teaching approaches, are especially relevant when taking into account the unintended practices that have become ingrained in teachers' instructional styles. As a result, whereas the main teaching strategies represented the teachers' opinions, there were also unanticipated behaviors that had inadvertently been ingrained in their teaching style.

To successfully match their values with their teaching strategies, educators must engage in reflective practice and continuous professional development. Teachers can find and fix differences between their professed ideas and their teaching methods by regularly reflecting. Maintaining educational integrity and making sure that teaching strategies satisfy the various requirements of students depend on this ongoing cycle of assessment and modification. These methods highlight how dynamic teaching is, highlighting its flexibility and dedication to quality.

Conclusion

There are many facets and complexities in the relationship between instructional techniques and teacher beliefs. For instance, in terms of curricular adherence and flexibility,



as well as the integration of language and material, all three teachers showed congruence between their beliefs and methods of instruction. Additionally, additional alignments within their teaching approaches were influenced by personal preferences. Classroom management, translanguaging, the facilitator's role, real-world linkages, cohesive teaching, repetition, and reinforcement are all things that Teacher 1 incorporated into her beliefs and practices.

Language use and requirements, differentiation, and the supervisory role were all areas where Teacher 2 aligned. Teacher 3 was in line with the requirements for language use, differentiation, comprehension checks, engagement, and comprehension. Furthermore, despite their claimed conviction in the value of self-reflection, none of the teachers' observations in the classroom demonstrated this. Teacher 1 specifically talked about differentiation as a belief, but throughout the courses, it was not evident in action. Each teacher also used extra techniques outside of these alignments that were not specifically addressed in their stated views. Both Teachers 1 and 3 used the progressive introduction technique. The transition class, the "I Do, We Do, You Do" concept, and cross-subject integration were also employed by Teacher 1. Understanding checks and the "Question & Answer" technique were employed by Teacher 2. Teacher 3 implemented co-teacher support.

Teachers' instructional views in bilingual immersion education are largely shaped by the school environment. This study investigated immersion bilingual instruction at a Khmer-English private school. Teachers' educational ideas and methods are influenced by the standards of this particular school that oversee the Khmer immersion program, which require them to incorporate language and material into their lessons. Because of this, educators not only recognized the value of this integration but also applied it in their classrooms through customized methods. Thus, immersion bilingual education programs reflect several implementation models, as covered in chapter 2. The contextual reality of a private school contributes to the variety of models in this study. Also, this paper found that the school-level environment plays a significant role, yet the individual and professional experiences of teachers also contribute substantially to shaping their diverse beliefs and instructional activities. Moreover, the interplay between beliefs and practices was consistently evidenced, reinforcing the need for their closer integration.



Suggestions

Suggestions for Future Practices

- 1. This paper underscore the integral role of professional development tailored to the unique belief systems and instructional practices of teachers, particularly emphasizing the integration of content and language instruction. Customized professional development not only enhances teaching quality by equipping educators with the necessary skills to implement effective instructional strategies in both domains but also ensures that students receive a uniform and high-quality education across content and language. This approach is most effective when it directly addresses the specific challenges teachers face in their instructional contexts (Desimone & Garet, 2015; Lyster, 2017).
- 2. Immersion programs for private schools primarily emphasize the critical role of school leadership in the design and implementation of these programs. This model highlights the importance of tailored educational strategies that private school leaders can utilize to effectively address specific student needs. Leadership is crucial in fostering a supportive and innovative school culture, which is essential for both implementing and sustaining immersion programs. Moreover, effective school leadership is linked to successful resource management, professional development, and strong communication with stakeholders, all of which are vital for the success of these programs (Battin, 2013).
- 3. Policymakers can significantly enhance language immersion programs by emphasizing the commitment to providing comprehensive professional development, which enhances educators' capabilities. This type of commitment from policy makers ensures that instructional methods are both innovative and tailored to meet the diverse needs of the student body. Setting appropriate and effective rules further supports the integration of content and language instruction, promoting the overall effectiveness of these practices.

Suggestions for future researches

1. Future research should comprehensively examine the long-term impact of sustained professional development alongside the critical role of institutional support in enhancing teaching effectiveness, particularly in the integration of content and language. Longitudinal studies are essential to assess how ongoing professional development influences the alignment between teacher beliefs and instructional practices.



- 2. The effectiveness of these instructional methods also heavily relies on the level of institutional support provided. Research should further investigate how administrative backing, resource availability, and school culture impact the adoption of innovative teaching strategies, which are crucial for sustaining improvements in educational practices.
- 3. Future studies should expand their scope to include a broader range of grades and a variety of school settings to better understand the dynamics of teaching content and language integration. Investigating across different grade levels and diverse educational environments will provide richer insights into how educational beliefs and practices vary and adapt to meet the developmental needs at each educational stage and within different institutional contexts.

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A Quantitative Study: Examining the Impact of Digital Leadership on School Effectiveness in Cambodia

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Abstract

The objectives of this quantitative study are to identify the digital leadership levels of school directors and to find out the relationship between digital leadership of school directors and the school effectiveness in Cambodia. The research sample consisted of 95 school directors and 459 teachers, yielding a total of 554 participants from upper secondary schools in Cambodia, in the academic year 2024-2025. The sample size was determined by stratified random sampling and simple random sampling techniques which were derived 100% of school directors and through 5% of total teachers by drawing lots. The research instrument for data collection were of 5-rating scale questionnaires, which were analyzed, synthesized and developed by the researcher. Collected data were analyzed using descriptive and inferential statistics through computer program procedures. The research results revealed that the digital leadership levels of school administrators both as a whole and by each dimension were at high levels. When considering each dimension, it was found that the dimension with the highest average was ethics and digital citizenship and the dimension with the lowest average was Digital Leadership Vision. Also, it was found that the digital leadership vision was highly correlated with school effectiveness leads to the digital competence. The digital competence and ethic and digital citizenship were positive related with school effectiveness having low level of beta. The MoEYS requires to inculcate digital, ethical and administrative features among leaders through training programs.

Keyword: Digital leadership, school effectiveness, impact, digital competence



Introduction

The win-win strategy has allowed Cambodia to attain total peace while preserving its territorial integrity, national unity, political stability, and socioeconomic growth (Royal Government of Cambodia – RGC, 2022; Lim, 2023). Numerous accomplishments have been completed in a short amount of time, and the execution of comprehensive reform programs has improved the lives of people from all walks of life. Before the Covid-19 pandemic, Cambodia achieved an average annual economic growth rate of about 7% thanks to the implementation of important national policies, such as the Triangle Strategy, the Rectangular Strategy, the National Strategic Development Plans, and the Cambodia Industrial Development Policy, all of which were carried out in total peace over the previous 20 years (RGC, 2022). In this context, Cambodia was rated as a new economic tiger in Asia in 2016 after being promoted from a low-income to a lower middle-income country in 2015. These outstanding accomplishments have altered Cambodia's reputation and position on the world scene, both domestically and internationally.

In line with the Cambodia Digital Economy and Society Policy Framework 2021–2035, the RGC will put the appropriate regulations into place to guarantee a robust and crisis-resistant digital ecosystem that reacts quickly to advancements in digital technology (RGC, 2022; Lim, 2023). The RGC has established the Cambodia Digital Government Policy 2022-2035 in accordance with the aforementioned policy framework, with a focus on the goal of "establishing digital government to improve the citizens' quality of life and build their trust through better public service provision." (RGC, 2022, p. ii). This will be accomplished through the creation of units responsible for digital transformation in ministries, institutions, and sub-national administrations, the creation of priority national budgets, the hiring of technical officers, and national coordination and implementation through the establishment of the Digital Government Committee.

In recent years, the GRC and the Ministry of Education, Youth and Sport (MoEYS) have made significant investments in school digitization. Despite these strong efforts, the impact on teaching and learning continues to be somewhat vague (Lim, 2023; Mok & Khim, 2024). In the report of MoEYS-Educational Congress (2024), results have shown that investments and access to digital technologies have increased, however, pedagogical development and digital competencies appear to have fallen behind (MoEYS, 22024). In order to adapt the education system to the



requirements of the digitalized knowledge society, national efforts in promoting the uptake and use of ICT in Cambodian schools have been implemented over many years. In this sense, the role of the school leader and the school leaders' digital competencies to lead strategically for digitalization and pedagogical development appears to be a key factor.

School directors' digital leadership is essential for today and the future (Mok, 2014; Lim, 2023). There are various issues associated with the digital leadership of school directors impacting on school effectiveness. Among these problems is the school directors understanding of digital technology, which is still impossible (Mok, 2014; Lim, 2023). School directors face insufficient resources to support digital learning, such as hardware, software, and teacher training in schools. They are coupled with the problem of teachers with digital skills' availability. Not all teachers have the digital skills necessary to use digital technology effectively in learning. Another problem is that there is still resistance to change. Some school directors, teachers, and parents may resist the changes in digital technology (Mok, 2014; Hang, 2017; Lim, 2023). Because of this, digital leadership has emerged as one of the key pillars supporting the sustainability of school development and effectiveness initiatives in the digital age and facilitating the digital transformation of schools (Mok, 2014; Lim, 2023). Hence, education technology should be incorporated into the curriculum to help students understand how to succeed in the digital world and to improve their academic performance.

Research Objectives

The objectives of this study were twofold:

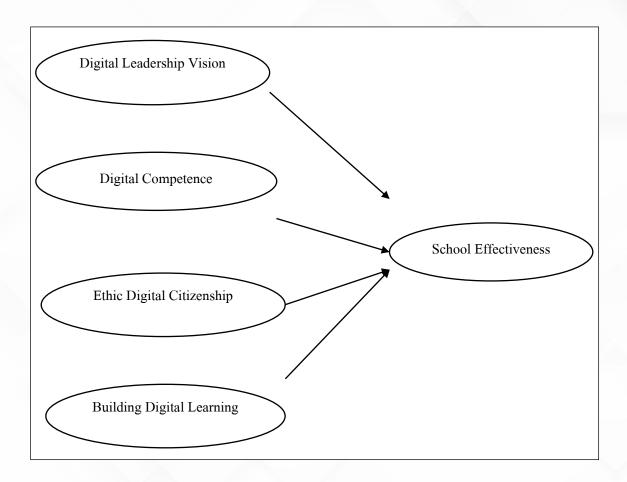
- 1. To identify the level of digital leadership of school directors in Cambodia.
- 2. To find out the relationship between digital leadership of school directors and the school effectiveness in Cambodia.



Conceptual Framework

Figure 1:

The Conceptual Framework Used in the Study



Research Hypotheses

Based on the conceptual framework, the hypotheses were identified as follows:

- H1: There is a positive relationship between digital leadership vision and school effectiveness.
 - H2: There is a positive relationship between digital competence and school effectiveness.
- H3: There is a positive relationship between ethic digital citizenship and school effectiveness.
- H4: There is a positive relationship between building digital learning and school effectiveness.



Research Methodology

The target population, sample size, sampling strategy, data collection, statistical approach, variable descriptions, and software utilized in the study are all covered by the research method. Because this study developed a conceptual framework for empirical verification based on previous research, quantitative research was used. Testing the current idea under various social circumstances makes quantitative research possible. For this study, the descriptive and correlational design is therefore more appropriate. As a result, this study employed a descriptive and correlational research approach.

The research sample consisted of 95 school directors and 459 teachers, yielding a total of 554 participants from upper secondary schools in Cambodia, in the academic year 2024-2025. The sample size was determined by stratified random sampling and simple random sampling techniques which were derived 100% of school directors and through 5% of total teachers by drawing lots. A survey questionnaire was the research tool used. The survey's five-point Likert scale, which consists of five closed-ended questions with five possible answers, gauges samples' opinions of the digital leadership and school effectiveness of their school administrators. Five specialists reviewed the research instrument's content validity. Between 0.60 and 1.00 was the Item Objective Congruence (IOC) index. This shows that all five experts are certain that the items accurately measure the skill. To evaluate the survey questionnaire's internal consistency or reliability, however, the researchers employed Cronbach's alpha. The fact that the Cronbach's alpha coefficient including a set on the digital leadership of school directors with the discriminative power ranging from .492 to .843 and its reliability of 0.92, and a set on the school effectiveness with the discriminative power ranging from .516 to .773, and its reliability of 0.91.

The digital leadership levels of school directors were interpreted based on the range and interpretation criteria of Norman (2010) as follows: Never – a score of 1, range from 1.00-1.50, interpretation of very low; Infrequently – a score of 2, range from 1.51-2.50, interpretation of low; Sometimes – a score of 3, range from 2.51-3.50, interpretation of moderate; Frequently – a score of 4, range from 3.51-4.50, interpretation of high; Always – a score of 5, range from 4.51-5.00, interpretation of very high.

The SPSS software was utilized for data analysis because the data is quantitative in nature. Initially, Cronbach's Alpha was used to examine the demographic data's reliability and



frequency distribution. Regression analysis, specifically multiple linear regression (MLR), was used to assess the hypotheses. Reliability analysis, descriptive statistics, regression analysis, and correlation analysis were all presented.

Research results

1. The Results of Constructs Reliabilities Analysis for each Variables

The constructs reliabilities findings show the reliabilities for each Variables in Table 1 below:

Table 1

Reliability Analysis of School Effectiveness and Digital Leadership

Constructs	Value of Cronbach's Alpha	Total Questions
1. School Effectiveness	0.91	10
2. Digital Leadership Vision	0.93	10
3. Digital Competence	0.91	10
4. Ethic Digital Citizenship	0.92	10
5. Building Digital Learning	0.94	10

Table 1 above shows the results of constructs reliabilities analysis for each variable. The table shows that school effectiveness has 10 questions; digital leadership vision, digital competence, ethic digital citizenship and building digital learning has 10, 10, 10 and 10 respectively. As stated, each construct utilized in this has a greater dependability value based on the reliability criteria (Cronbach's Alpha value >.60) (Hair Jr & Sarstedt, 2021). It indicates that all variable scales are reliable, thus we move forward with testing the information. This demonstrates that the scales employed in each question are suitable and intelligible for the participants in the study.

2. The Results of Digital Leadership Levels of School Directors in Cambodia

To explore the current digital leadership levels of school directors in greater detail, the digital leadership was categorized into four separate dimensions: Digital Leadership Vision,



Digital Competence, Ethic and Digital Citizenship, and Building Digital Learning. Collected data were analyzed by using Descriptive Statistics as shown in Table 2 below:

Table 2

Overall Mean, Standard Deviation Scores of Digital Leadership of School Directors

NI.	Dimensions		Practice L	evel	
No.	140. Dimensions	\overline{x}	S.D.	Level	Rank
1.	Digital Leadership Vision	4.22	0.45	High	4
2.	Digital Competence	4.23	0.46	High	3
3.	Ethic and Digital Citizenship	4.33	0.63	High	1
4.	Building Digital Learning	4.27	0.78	High	2
	Total	4.26	0.58	High	

As revealed in Table 2 above, it was found that the digital leadership levels of school administrators both as a whole and by each dimension were at high levels. When considering each dimension, it was found that the aspect with the highest average was ethics and digital citizenship $(\bar{x}=4.33, \text{S.D.}=0.63)$ and the aspect with the lowest average was Digital Leadership Vision $(\bar{x}=4.22, \text{S.D.}=0.45)$.

2. The Results of Relationship between Digital Leadership and School Effectiveness

To find out the relationship between digital leadership of school directors and their school effectiveness, the researcher used the school effectiveness index to measure the school effectiveness. Data collected were analyzed using Inferential Statistics (Pearson Correlation).

Table 3

Relationship between Digital Leadership and School Effectiveness

Pearson Correlations	\overline{x}	S.D.	1	2	3	4	5
1. School Effectiveness	4.22	0.46	1				
2. Digital Leadership Vision	4.23	0.45	0.66**	1			
3. Digital Competence	4.33	0.46	0.59**	0.79**	1		



4. Ethic and Digital Citizenship	4.27	0.63	0.53**	0.71**	0.63**	1
5. Building Digital Learning	4.22	0.78	0.30**	0.26**	0.31**	0.21** 1

^{*} Significant at .05 level.

Table 3 shows the results of the data set of the descriptive statistics and correlation analysis. The results show that each variable's mean is more than 3, meaning that most of the samples agreed with the questionnaire's statements, while standard deviation shows the deviation from the mean. The standard deviation value is less than 1, which means that respondents are either neutral or agree with each statement of the leadership style and job satisfaction and do not disagree with the factors questions statement given in the questionnaire. The correlation analysis shows that the relationship between the variables is either positive, negative or no correlation. The results of this study show a robust positive association between school effectiveness and four dimensions of digital leadership as values of Pearson correlation show more than 0.60, representing a solid association between the variables. The results of this study also illustrate the significant relationship between school effectiveness and digital leadership working in the organization as the sig value is less than 5%.

Findings in Table 4 below are also used to analyze the hypothesis developed through literature review and summarized based on techniques used in the data, such as this study utilizing the ordinary least square technique. The study utilized multiple regression tests to summarize the study hypothesis, such as hypotheses 1-4. In this study, four predictors and 1 variable of regressor were used to test the study hypotheses.

Table 4

Results of Multiple Linear Regression

Variables	Beta	Sig.	Tolerance	VIF
Constant	1.063	0.001		
Digital Leadership Vision	0.43	0.001	0.285	3.508
Digital Competence	0.12	0.041	0.344	2.905
Ethic and Digital Citizenship	0.08	0.033	0.474	2.11

^{**} Significant at .01 level



Building Digital Learning	0.13	0.025	0.901	1.11
Pearson Correlation R	0.685			
Adjusted R Square	0.448			
Durbin-Watson	2.08			
F-statistics	22.323			
F-statistics Sig. value	0.000			

Table 4 indicates that digital leadership vision has a positive as well as significant impact on school effectiveness (β = 0.43, p 0.001 < 0.05), Digital Competence has a positive relationship and impact significantly on school effectiveness (β = 0.12, p .0412 < 0.05), findings also show a positive relationship of Ethic and Digital Citizenship with significant impact towards school effectiveness (β = 0.139, p .0.033 < 0.05). Also, the output of the Building Digital Learning indicates a significant and positive influence on school effectiveness (β = 0.087, p .025 < 0.05). Based on the above-mentioned results, the research hypotheses (H1, H2, H3, and H4) are all accepted.

Discussion and Conclusion

The results of the four dimensions of digital leadership of school administrators indicated that there are at a "high" level. This implies that digital transformation has infiltrated all factors. Digital technology has taken part in the administration of educational institutions in various fields. In addition, the government education policy encourages the adoption of digital technology to play a role in education management. School administrators need digital leadership to manage educational institutions to match the era (Mok, 2014; Lim, 2023). When considering each aspect, it was found that the areas with the highest averages were ethics and digital citizenship. This may be due to the fact that school administrators with the vision or digital ability to manage are a good thing. That will allow school administrators to create an organization with superior potential to other organizations. However, what must be emphasized in order to enable the organization to operate stably is to recognize and encourage teachers to understand the virtues and ethics of being a digital citizen in the digital era. School administrators know how to use the information correctly without violating the rights or laws of the use of technology and social responsibility. This is



consistent with the results of Mok (2014) and Lim (2023) who studied the leadership of high school administrators in Cambodia and found that school administrators has the highest average score of using technology in daily administration and school operation. It is a great thing to have this qualification to be an exemplary school administrator in the use of technology. The school administrators should be socially responsible for complying with technology use laws.

The research results primarily focus on the aim utilized to test the impact of school effectiveness and the role of digital leadership used at work. This study used multiple linear regression to test hypotheses; findings show that digital leadership vision is positively associated with school effectiveness. Findings also reveal that the digital competence positively impacts basic education institutions in Cambodia. As a result, this study adds to the current literature on school effectiveness in basic-level employees associated has validated that employees work on their position, which has received minimal validation as studied by (Mok, 2014; Hang, 2017; Lim, 2023). The research findings provide the solution to calls from (Spreitzer & Hwang, 2019; Paterson et al., 2014) to research the underlying role and effects of digital leadership style in developing school effectiveness level-at-work qualities like creativity. This study's findings confirm the link between psychological processes and motivational outcomes. They also suggest that people are more productive and feel better when they work in a good atmosphere. However, there is still work to be done to ascertain whether workplace flourishing is associated with outcomes like improved implementation and well-being (Paterson et al., 2014), with a significant amount of additional employment needing to be achieved. These findings support the idea that incentive systems and motivating outcomes — like the performance of employees at the level of higher education institutions — are related. They suggest that people who work in pleasant, happy environments are more productive and happier.

Suggestions

1. Suggestions for Future Practices

1. According to the study's findings, school administrators' digital leadership has the lowest average scores in the digital leadership vision. Therefore, in order to achieve tangible outcomes, the Ministry of Education, Youth and Sport (MoEYS) and the Provincial Office of Education, Youth and Sport should support and encourage school administrators to establish



a vision in collaboration with teachers and other relevant parties. This should include expressing clear operational instructions.

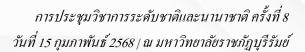
2. The empirical harmony of the digital leadership is demonstrated by the findings of the empirical data model harmonization study. Thus, in every aspect, school administrators should be encouraged to exercise digital leadership by MoEYS. As a result, the school's overall efficacy will continue to improve.

2. Suggestions for the Future Study

- 1. To illustrate a more lucid perspective on the application of the research findings, future studies should employ the mediator variables that are conveyed from the digital leadership of the school administrators that impact the school's success.
- 2. The findings of the research should be expanded upon and applied through the development of a new model based on observations of digital leadership.

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Factors Affecting on Khmer High School Teachers' Quality of Work Life: A Preliminary Study

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Abstract

The quality of work life of teachers is a challenge in the field of education for public secondary schools in Cambodia, and it affects the sustainability of teachers' performance. The objective of this study is to find out the key factors affecting the quality of working life of Khmer teachers at high schools in Cambodia. This study also compares the similarities and differences between the key factors affecting the quality of working life according to demographic information and the relationship between the variables of those key factors. A total of 110 high school teachers from different demographic characteristics from 4 representative provinces participated in this study. The instrument used in this study was the set of questionnaires, including 30 items, which was adapted and prepared by researchers with its reliability at excellent level (0.92). The validity of the instrument was verified and the forms were back-translated to minimize ambiguity and errors. Collected data were analysed using descriptive and inferential statistics through computer program procedures. The findings revealed that the key factors affecting the quality of working life of Khmer teachers at high schools in Cambodia both as a whole and by aspect were at high levels. Ranks from the highest to the lowest mean scores were: Alliance to organization, Job Satisfaction, Organizational Environment, Quality of Working Life, and Organizational Culture, respectively. The results of this study contribute to the field of mental health counseling as well as counselor educators and supervisors by expanding knowledge of the impact of the work environment on the perceived stress and professional quality of life.

Keyword: Life quality, working life, Khmer teacher



Introduction

The State shall protect and upgrade citizens' rights to quality education at all levels and shall take necessary steps for quality education to reach all citizens. The State shall respect physical education and sports for the welfare of all Khmer citizens. The state shall establish a comprehensive and standardized educational system throughout the country that shall guarantee the principles of educational freedom and quality to ensure that all citizens have equal opportunity to earn a living. (The Constitution of The Kingdom of Cambodia, 1993, article 65 and 66, p.14). This cannot be achieved without the involvement of teachers.

Improving the quality of secondary education for public sector to meet the minimum standards was a goal of the World Bank improving the quality of secondary education. The purpose of this project was to strengthen school management, improving the quality of teaching and learning for the classroom level by improving the qualifications of teachers, providing consultant and accurate assessment of teachers' competencies, and the supported teaching structure (World Bank, 2019). Many studies explained that the higher the degree of teachers, the higher the quality of teaching (Ministry of Education, Youth and Sports, 2018). The teacher policy also motivated and retained in the system. Improving conducive working environments and living conditions of teachers through the provisions of salary, remuneration/ compensation, social welfare, general benefits and retirement benefits, particularly females and those who work in remote and disadvantaged areas (Ministry of Education, Youth and Sports 2013). All of these points focus on the quality of life of teachers.

Many studies reflected the quality of work life of teachers. Ana et al. (2009) researched the pros and cons of stress and quality of work life. Meanwhile, M. Joseph, Nora, Gorman (2012) also studied work and quality of life by applying ethics in the organization. This research focused on the work environment in relation to quality of work life: job satisfaction and performance. According to Akram et al. (2007) also studied the quality of life of teachers, but a comparative study between public school teachers in Turkey and Pakistan. The study showed that Turkish teachers had low levels of Job satisfaction with fair and equitable wages, suggesting that income and other benefits should be increased. The study pointed that the quality of life of Pakistani teachers was higher than the quality of life of Turkish teachers. The results of another study manifested the motivation for the teaching profession, emphasizing that it was important to



understand how teachers' motivation differs at different stages because teachers face many changed in their careers at home and their personal lives from the beginning of their teaching careers until they retire. All of these changes affected their motivation, values and ability to carry out their work successfully. Much of the research on differences in teacher motivation at the professional stage had focused on teacher effectiveness. And it was the teachers' belief in their ability to do any job (Richardson & Watt, 2008; Tschannen Moran & Woolfolk Hoy, 2001). According to Pramahathip (2020) studied the factors affecting the quality of work life of teachers at the Phrapariyattidhamma school focusing on 5 factors: 1) - Organizational environment 2) - Organizational culture 3) - Job satisfaction 4) - Commitment to the organization and 5) - Quality of working life. As a result, each factor affected the other, especially the organizational culture, which had a direct effect on job satisfaction and job satisfaction, directly affecting organizational commitment at the 0.01 level. This research is in the context of Thailand, not a study of the quality of work life of Cambodian teachers. For Oum and Sok (2021) showed that respondents who had a job and decided to return to work as teachers because it is a long-term job and have better working conditions compared to their previous jobs. Most were private jobs that were rigorous and busy. The research is in the context of Cambodia, not a real study of the quality of work life of upper secondary teachers in Cambodia.

Based on this spirit, this research will present scientific results as a key input in responding to Cambodia's deep reforms. It also contributes to improving the quality of teachers' work life to strengthen and expand the quality of Cambodia education in line with the needs of the region and the globe.

Research objective

This research has two main objectives: (1) to compare the differences and similarities of the factors affecting on Khmer High School Teachers' Quality of Work Life in Cambodia based on age, gender, qualification, and work experience; and (2) to explore the key factors affecting on Khmer High School Teachers' Quality of Work Life in Cambodia on 5 components: Quality of work life (QWL),Organizational Environment (OE),Organizational Culture (OC),Job Satisfaction (JS), Alliance to the Organization (AO).



Research Methodology

The target sample size for this study was 110 teachers, divided into 65 males and 45 females high school teachers who were teaching at four high schools, capital-province, representing each region (Central Plain, Coastal and Sea, Tonle Sap, Plateau and Mountains), (National Institute of Statistics, Ministry of Planning, 2019) using Stratified Random Sampling and Simple Random Sampling and selecting 59.1% for male teachers and 40.90% for female teachers.

The instrument used in this research is a questionnaire on Teachers' Quality of Work Life. This questionnaire has the following structure: 1) Study documents, existing research papers and thesis related to quality of work life in the country, region and globe by adapting the questions derived from Mpho (2013), Sophak (2018), and Malyskrang (2020), 2) Based on concepts and data obtained and synthesized from the first step, the research was able to develop a questionnaire including 5 components: Quality of work life(QWL), Organizational Environment (OE), Organizational Culture (OC), Job Satisfaction (JS), Alliance to the Organization (AO), 3) asking for comments and feedback from the main advisor and co-advisor to check the consistency and accuracy of the instrument and recommendations for further editing, 4)checking the validity with three experts in the areas of Linguistics, Education and statistics to examine the consistency and accuracy of the contents with the index of Item-Objective Congruence to confirm the questionnaire aligns with the global and regional standard and Combodian context, 5) Gender analysis was performed using t-test (Indent samples t-test) and analysis of age, qualifications and work experience was hypothesized using F-test (One-way ANOVA) and analyze the differences in pairs as appropriate using Scheffe-Method or LSD.

Research Results

This section presents the findings of this study. The results of each research objective are described in the following Order: (a) research objective 1 regarding the difference and sameness based on Khmer High School Teachers' demograppgics, and (b) research objective 2 based on Khmer High School Teachers' view of Quality of Work Life of Teachers on 5 components including Quality of work life, Organizational Evironment, Organizational Culture, Job Satisfaction, and Alliance to the Organization.



1. Research Objective 1: To compare the differences and similarities of the factors affecting on Khmer High School Teachers' Quality of Work Life in Cambodia based on Khmer High School Teachers' demograppics.

The Variable data demographic information of the research samples collected for this study was subdivided into gender, age, qualification level, and teacher experience variables. For this study, 110 researched samples were collected, equivalent to 100%, by completing the survey questionnaire on the level of understanding of the quality of work life of high school teachers who were teaching from grade 7 to 12 by capital-province in Cambodia.

1.1 Gender variables of the research sample

This study analyzed the gender variables of 110 sample of high school teachers as shown in Table 1 below:

Table 1

Number and percent of research samples by gender (n = 110)

Gender	N	Percent
Male	65	59.10
Female	45	40.90
Total	110	100

The researchers collected demographic information from a sample of 110 high school teachers in all 1 capital city and 3 provinces, determining the number of samples by gender. The results showed that there were 65 male high school teachers or 59.10%, followed by 45 female high school teachers or 40.90%.

2.2. Age variables of the research samlpe

This study analyzed the age variables of 110 target sample as high school teachers as shown in Table 2 below:



Table 2

Number and percent of research samples by age (n = 110)

Age	N	Percent
under 40 years old	30	27.30
40-45 years old	57	51.80
over 50 years old	23	20.90
Total	110	100

The researchers collected demographic information from a sample of 110 high school teachers in all 1 capital city and 3 provinces, determining the number of samples by age. The results found that 30 high school teachers under the age of 40 accounted for 27.30%, followed by 57 high school teachers between the ages of 40 and 45, accounted for 51.80%, and the lowest number was 23 high school teachers over the age of 50, accounted for 20.90%, orderly.

2.3. Qualification variables of the research samlpe

This study analyzed the qualification variables of 110 sample of high school teachers as shown in Table 3 below:

Table 3

Number and percent of research samples by qualification (n = 110)

Qualification	N	Percent
Under Bachelor	30	27.30
Bachelor	66	60.00
Higher Bachelor	14	12.70
Total	110	100

The researchers collected demographic information from a sample of 110 high school teachers in all 1 capital city and 3 provinces, determining the number of samples by qualification. The results found that there were 30 high school teachers with under bachelor's degree or 27.30%,



followed by 66 high school teachers with a bachelor's degree or 60.00%, and the lowest number is high school teachers with higher bachelor's degree. 14 people, equivalent to 12.70%, orderly.

2.4. Work experience variables of the research samlpe

This study analyzed the work experience variables of 110 sample of high school teachers as shown in Table 4 below:

Table 4

Number and percent of research samples by work experience (n = 110)

Work experience	n	Percent
Under 10 years	13	11.80
Between10-20 years	47	42.70
Over 20 years	50	45.50
Total	110	100

The researchers collected demographic information from a sample of 110 high school teachers in all 1 capital city and 3 provinces, determining the number of samples by work experience. The results found that There were 13 high school teachers with less than 10 years of experience, equal to 11.80%, followed by 47 high school teachers with 10-20 years of experience, equal to 42.70%, and the highest number is more than 20 years of experience, 50 people, equivalent to 45.50%, orderly.

2. Research Objective 2: To explore the factors affecting on Khmer High School Teachers' Quality of Work Life in Cambodia.

The surveyed participants of the study concisted of 110 high school teachers directly teaching from grade 7 to 12 in Phnom Penh, Siemreap, Shihanouh, and Steungtreng province in Cambodia. The final version of the questionaire included 30 items to assess quality of work life of high school teachers with 5 components: Quality of work life (QWL), Organizational Evironment (OE), Organizational Culture (OC), Job Satisfaction (JS), Alliance to the Organization (AO).



Criteria for explaining and interpreting mean values are defined according to Srisa-ard (2003), divided into the following five levels:

- 4.51-5.00	meaned	Quality of work life of teacher	Very High
- 3.51-4.50	meaned	Quality of work life of teacher	High
- 2.51-3.50	meaned	Quality of work life of teacher	Medium
- 1.51-2.50	meaned	Quality of work life of teacher	Low
- 1.00-1.50	meaned	Quality of work life of teacher	Very Low

The data collected were analyzed by descriptive statistics such as frequency, percentage, mean value and standard deviation. The main results of the overall research by segment are shown in Table 5 below:

Table 5Components of Quality of work life of teachers

	0 11 0 1 110 0 1	n=110		0.1	
No.	No. Quality of work life of teacher	M	SD	Order	Interprete
1-	Quality of Work Life	3.74	0.58	4	High
2-	Organizational Environment	3.84	0.60	3	High
3-	Organizational Culture	3.66	0.68	5	High
4-	Job Satisfaction	3.96	0.66	2	High
5-	Alliance to Organization	4.24	0.69	1	High
	Total	3.89	0.55	h.,	High

As revealed in the Table 5 above, the research found that the quality of work life of teachers in terms of perceptions of teachers in the capital and provinces in Cambodia as a whole is high, with mean value (3.89) and a standard deviation (0.55).



Discussion and Conclusion

Applied research is a powerful tool to help solve problems in the education setting. Applied research with a program evaluation design focuses on one central phenomenon, developed in a natural setting, and evaluated to determine if the program was effective. Applied research is based on inquiry, reflection, and data analysis. The findings are used to implement change.

The overall Knowledge learned from this study was that the researchers found that among demographics variables, the researcher remarked one, work experience, that Khmer teachers spent long term in teaching based on the most of them, 50 teachers, equally to 45.50% as well as long-term employment (Oum & Sok, 2021). Also, in this study, the researchers found that the quality of work life of high school teachers with five factors above were high indeed. This may explain that the quality of work life of teachers, whether teachers are satisfied, have good relationships, have unity in the work with a spirit of friendship, brotherhood, because in Cambodian society, teachers are a professional job that helps society based on two important reasons. The first reason in the Cambodian context is that solidarity is seen as a whole value in work. The second reason is that Khmer teachers have the love, satisfaction and career that their ancestors used to value in helping the society by those people who should be respected and teachers were called by scholars because they make them float, more much dignity and good honor in the whole society (Yin, 1995), and teachers are the key to the quality of the educational system (Harris, 2011).

Suggestions

Based on the study, research results discussed above, researchers defined as a brief recommendation as well as suggestions are as follows:

1. Suggestions for Future Practices

- 1. To develop the quality of working life of teachers, it is first necessary to identify and consider the satisfaction that is a necessary need of teachers through their work experience in a clear work environment.
- 2. Experienced teachers with long term should be encouraged, especially when they retire and work disability in any situation.



3. To implement technology as a valuable engagement tool, school leaders need to assess the technology knowledge of the program instructors. Integrating technology to increase student engagement was not used effectively. Even though the team offered training, more training was needed. Using technology is seen as a key factor, contributing to the enhancement of classroom instruction which influences student engagement. Integrating technology into instructional activities increases student engagement and contributes to the role technology plays in creating student engagement. Technology can be useful if it is used effectively.

2. Suggestions for Further Studies

- 1. Continue to research the quality of work life of teachers to create a standard model in accordance with the Cambodian context.
- 2. Continue to research the quality of life of teachers by comparing the quality of work life of teachers in the provinces with the capital.
- 3. Continue to research new research methods on the quality of work life of teachers to contribute to the Royal Government of Cambodia in the development of education in Cambodia.
- 4. Future research can be done on the role technology plays in increasing student engagement and integrating technology seamlessly in the instructional activities to involve all students in the learning process.

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A Systematic Synthesis Review of Recent Studies on Effects of AI-Powered Writing Assistant on English Writing

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Abstract

In this digital era, advanced computer technologies, particularly artificial intelligence (AI), create systems capable of performing tasks that typically require human intelligence. AI has played a revolutionary role in English language teaching and learning. In terms of writing, AI assists in various aspects, from instruction to evaluation, making English writing more intellectualized and humanized. Previous research highlights the effectiveness, reliability, and precision of AI tools in improving writing and aiding the evaluation of written works. This article, therefore, reviews and synthesizes ten studies published in the form of journal and proceedings articles during 2020-2024 to draw a comprehensive understanding of the benefits and challenges associated with AI-powered writing assistants in the context of English writing. This review concluded that AI-powered writing tools notably improved vocabulary, grammar, organization, AI positively impacted writing motivation, self-efficacy, engagement, and collaborative writing tendencies. This article offers valuable insights into optimizing the use of AI in the teaching and learning of English writing. It highlights opportunities to contribute to existing gaps in literature, shedding light on potential future research to fill these gaps. Perspectives on policymaking regarding AI applications in English language teaching programs and institutions are also provided.

Keyword: artificial intelligence, writing assistant, writing tools, English writing, second language writing



Introduction

The emergence of artificial intelligence has revolutionized the technological landscape, marking a significant shift from traditional computing paradigms. Originating from the theoretical foundations laid by pioneers like Alan Turing, AI has evolved through various stages, including symbolic AI, machine learning, and deep learning. The Dartmouth Conference in 1956, where the term "artificial intelligence" was first coined, is often cited as the birth of AI as a formal field of study. Since then, AI has progressed from simple rule-based systems to sophisticated algorithms capable of performing complex tasks, such as natural language processing and image recognition (Popenici & Kerr, 2017).

Artificial intelligence has spread its impact to various aspects of human life. In everyday life, AI enhances efficiency and convenience through applications like virtual assistants, recommendation systems, and autonomous vehicles. However, the integration of AI also raises ethical concerns, such as data privacy and the potential for bias in decision-making processes. As AI continues to permeate various aspects of life, its influence on both personal and professional domains is expected to grow. AI also has played vital roles in education. It offers personalized learning experiences, automates administrative tasks, and provides valuable insights into student performance, thereby transforming traditional educational paradigms. AI has placed its steps in language education through various innovative tools and technologies that enhance both teaching and learning experiences. These tools help learners improve language skills by offering real-time corrections and tailored exercises, thereby fostering a more engaging and effective learning environment. Additionally, AI assists teachers by automating routine tasks, allowing them to focus more on students' interaction and personalized instruction (Marghany, 2023).

In the realm of English education, AI significantly enhances English language learning by providing tailored support across various skills. These technologies collectively create a comprehensive and adaptive English language learning environment that caters to individual needs and promotes effective language acquisition. For listening and speaking, AI-powered applications offer interactive practice sessions, real-time pronunciation feedback, and simulated conversations, helping learners improve their fluency and comprehension. In reading, AI tools can recommend personalized reading materials and provide instant translations and explanations of unfamiliar words, aiding vocabulary acquisition and comprehension. For writing, AI-driven platforms like



Grammarly and ProWritingAid offer grammar checks, style suggestions, and real-time corrections, enabling learners to refine their writing skills. Besides, AI tools can assist with brainstorming and organizing ideas, ensuring logical flow and coherence in writing. These AI technologies not only improve the accuracy and clarity of written content, but also support writers in developing their unique voice and style (Gayed, Carlon, Oriola & Cross, 2022).

The integration of AI-powered writing assistants in English writing has garnered significant attention in recent years, prompting a surge in scholarly investigations. This review article systematically synthesizes recent studies to evaluate the effects of these tools on various aspects of English writing. Notably, AI writing assistants have been shown to enhance writing efficiency, improve grammatical accuracy, and support idea generation and structuring. However, concerns regarding academic integrity and the potential for over-reliance on these tools persist3. By examining the methodologies and findings of key studies, this review aims to provide a comprehensive understanding of the benefits and challenges associated with AI-powered writing assistants in the context of English writing. Significantly as it consolidates and evaluates the latest research on the impact of AI tools in enhancing English writing skills, this article offers valuable insights for educators, researchers, practitioners, instructors, and linguists aiming to optimize the use of AI in the teaching and learning of English language writing.

Objective of the Study

The objective of this study was to examine and synthesize effects of the application of AI-powered writing assistant on English writing conducted in recent studies.

Research Question

Based on the objective of this study, the main question to be addressed was:

What were the effects of AI-powered writing assistant on English writing?

To achieve this research question, the following research data were explored: methods and designs, sample group and size, sampling methods, instruments, variables, data collection and analysis methods, findings, conclusions, and recommendations.



Research Methodology

Design: The primary purpose of this study was to gain a deep understanding of the benefits and challenges associated with AI-powered writing assistants in the global context of English writing. This study was thus designed as a descriptive study using the qualitative approach based on a systematic integrative literature review. This is a distinctive research method that aims at creating new knowledge by reviewing, synthesizing, evaluating, and setting new frameworks making use of the representative literature on a specific topic (Torraco, 2005). In this integrative literature review study, document analysis was used to collect the necessary data as it is a procedure for reviewing or evaluating documents which is then used for interpreting and eliciting the meaning to gain an understanding and develop empirical knowledge (Bowen, 2009). At the same time, the integrative literature review synthesizes the existing research knowledge by identifying commonalities and gaps in the current research, answering new questions, and determining the direction of research tendencies in future studies (Russell, 2005).

Data Collection: There has been a rising trend in conducting and publishing studies regarding AI-powered writing assistants in the global context of English language teaching and learning. To gain the most recent insights into AI's impact on English writing, this study collected existing research published in five years (2020-2024). For data collection, the web search engine Google Scholar was used. Google Scholar indexes the full text or metadata of scholarly literature across various publishing formats and disciplines. It includes peer-reviewed online academic journals, books, conference papers, theses, dissertations, preprints, abstracts, and technical reports.

This study was conducted in January 2025. An initial search for research studies to be used for the integrative literature review and analysis was conducted online with several keyword combinations. The following keyword combinations were used interchangeably and separately in each search.

"AI + English + writing," "AI + writing + instruction," "AI + writing + teaching," "AI + writing + learning," "AI + effects + writing," "English + writing assistant," "English + writing tools," "AI-powered + English writing," "AI-powered + writing + instruction," "AI-powered + writing + teaching," "AI-powered + writing + learning," "automated + English + writing," "artificial intelligent + writing + assistance tools," "English + writing technologies," and "English + automatic text generation."



The initial search via these keyword combinations yielded 56 results. Subsequently, the search results were carefully checked and selected based on the specific eligibility inclusion criteria established by the researchers. The criteria were subjected to the scope of the study. The search results were deemed eligible to be included in the integrative literature review and analysis in case they were 1) addressing the use of any AI tools in assisting or improving English writing by any means, 2) written in the form of research articles/papers, and 3) published in conference proceedings or indexed journal. Finally, it was determined that ten articles, which were highly related to the Thai context, conformed to the defined eligibility criteria.

Research Results

The list of the included articles for the integrative literature review and analysis is presented in Table 1.

Table 1

The included articles for the integrative literature review and analysis

Publication years	Author	Journal	N
2024	Teng; Tsai, Lin, & Brown; Herwanis, Zakaria, Rusmiati & Wahyuningsih; Artiana & Fakhrurriana	/	4
2023	Alammar & Amin; Marghany; Rad, Alipour & Jafarpour	/	3
2022	Kurniati & Fithriani; Gayed, Carlon, Oriola, & Cross;	/	2
2021	Nazaria, Shabbir, & Setiawan	/	1
2020			
Total	10	10	10

Over the past five years, there has been a significant increase in research focused on AI-powered writing assistants aimed at improving English writing skills. The surge in interest in AI tools has shown the growing importance of these technologies in the English language writing context.



Table 2
Synthesized articles distributed by authors, objectives, population, and sample

Author (Publication	Objective	Population	Sample (N)
years)			
Tsai, Lin, &	To determine the impacts of using ChatGPT to	EFL students	44
Brown (2024)	revising essays.		
Herwanis,	To investigate the efficacy of a certain method and	EFL students	
Zakaria,	AI tools in improving students' English writing		
Rusmiati &	proficiency.		
Wahyuningsih			
(2024)			
Teng (2024)	To explore the potential impact of ChatGPT on	EFL students	45
	writing		
	To examine perceptions of ChatGPT		
	To study experience in using ChatGPT in generating		
	feedback for writing		
Artiana &	To explore the perspectives of EFL undergraduates	EFL	75
Fakhrurriana	on the use of	undergraduates	
(2024)	ChatGPT in academic writing.		
	To examine EFL	EFL students	25
Alammar &	students' perceptions of using APTs in writing		
Amin (2023)	To determine the advantages, disadvantages, and		
	drawbacks of using APTs		
Marghany	To investigate the use of	English-	100
	Grammarly to develop the Egyptian higher education	majoring	
	students' FL essay writing skills.	senior students	
(2023)			



Author (Publication years)	Objective	Population	Sample (N)
Rad, Alipour, & Jafarpour (2023)	To use Wordtune application to foster students' writing feedback literacy, engagement, and outcome.	Upper- intermediate level students	46
Kurniati & Fithriani (2022)	To investigates how post-graduate students view Quillbot as a digital tool for English academic writing	Post-graduate students majoring in English education	20
Gayed, Carlon, Oriola, & Cross (2022)	To examines the participants' written text along two quality dimensions: lexical diversity (LD) and fluency.	EFL adult students	10
Nazaria, Shabbir, & Setiawan (2021)	To examine the efficacy of a group format of an Artificial Intelligence (AI) powered writing tool	Non-native postgraduate students in the English academic writing context	120

Objective: The common research objective was to explore the multifaceted impacts of AI-powered writing tools, particularly ChatGPT, on English writing proficiency. It seeks to determine the effectiveness of these tools in revising essays, generating feedback, and enhancing writing skills among students, including EFL undergraduates and post-graduate learners. These studies also investigated perceptions and experiences of using AI tools like Grammarly, Wordtune, and Quillbot, examining their advantages, disadvantages, and overall efficacy. Additionally, they evaluated the quality of written texts in terms of lexical diversity and fluency, and assessed the



potential benefits and drawbacks of using AI tools in both individual and group formats for academic writing.

Population: The research population groups consisted of various levels of English as a Foreign Language (EFL) learners, including EFL students, undergraduates, and adult learners. The reviewed research also encompassed English-majoring senior students, upper-intermediate level students, and post-graduate students majoring in English education. Additionally, they includes d non-native postgraduate students engaged in English academic writing contexts.

Sample size: The research sample sizes varied widely, ranging from small groups of 10 and 20 participants to larger cohorts of 44, 45, 46, 75, 100, and up to 120 individuals. This diversity in sample sizes allows for a comprehensive analysis across different study scales and contexts.

Table 3

Synthesized articles distributed by research design, AI-powered writing assistant, intervention duration, and research results

Author (Publication years)	Research design	AI-Powered writing assistant	Intervention duration	Research results
Tsai, Lin, & Brown (2024)	A prospective, double-blinded, paired-comparison, and experimental	ChatGPT	One semester	Significant improvements were observed in vocabulary, followed by grammar, organization, and content.
Herwanis, Zakaria, Rusmiati &	A mixed- methods	Multi AI tools	Seven semesters	Human methodology and



Author (Publication years)	Research design	AI-Powered writing assistant	Intervention duration	Research results
Wahyuningsih (2024)	approach			artificial
				intelligence tools
				improve
				students'
				competency in
1				English writing.
	A mixed-	ChatGPT	One semester	AI assistance has
	methods			positive effects
	approach			on writing,
				including writing
Teng (2024)				motivation, self-
				efficacy,
				engagement, and
				collaborative
				writing tendency
	A qualitative	ChatGPT	One course	ChatGPT is an
	approach			effective
	1			solution to
				overcome writing
Artiana &				challenges,
				enabling them to
Fakhrurriana (2024)				produce
				work more
				efficiently and
				quickly.
A1 0 4 :	A mixed-	AI-driven	One course	APTs have a
Alammar & Amin	method	automated		significant
(2023)	approach	paraphrasing		impact on



Author (Publication years)	Research design	AI-Powered writing assistant	Intervention duration	Research results
¥		tools		academic
				writing process.
	Control group and experimental	Grammarly	12 weeks	There was better improvement in the performance
Marghany (2023)	group			of experimental
Marghany (2023)				participants compared to their control group counterparts.
	A mixed-	Wordtune		The experimenta
Rad, Alipour, & Jafarpour (2023)	method study			group was able to significantly improve their writing outcomes, engagement, and feedback literacy when compared to the control group.
Kurniati & Fithriani (2022)	A qualitative case study	Quillbot		Quillbot assists in improving the quality of writing,



Author (Publication years)	Research design	AI-Powered writing assistant	Intervention duration	Research results
				enhancing
				positive attitudes
				toward writing,
				providing a
				variety of user-
				friendly writing
				features, and
				aiding students'
				language
				development.
	A counter-	AI KAKU		AI is useful tool
	balanced			for English
Gayed, Carlon, Oriola,	experiment			language learners
& Cross (2022)				who need more
				structured
	1			assistance.
	Experimental	Grammarly	12 weekly two-	AI-powered
	& control		hour sessions	writing tools
Nazaria, Shabbir, &	group			promote learning
Setiawan (2021)				behavior and
500awan (2021)				attitudinal
				technology
		4		acceptance

Research design: The research designs employed in these studies are diverse, encompassing both qualitative and quantitative methodologies. They include prospective, double-blinded, paired-comparison, and experimental designs, as well as mixed-methods approaches that combine qualitative and quantitative data. Some studies utilize control and experimental groups,



while others adopt qualitative case studies or counter-balanced experiments. This variety in research design allows for a comprehensive examination of research questions from multiple perspectives and methodological frameworks.

AI-powered writing assistant: The research studies utilized a variety of AI-powered writing assistants, including ChatGPT, which is prominently featured in multiple studies. Other tools examined include Grammarly, Wordtune, Quillbot, and AI KAKU, as well as a range of AI-driven automated paraphrasing tools. Some studies also explore the use of multiple AI tools to provide a comprehensive analysis of their effectiveness in enhancing writing skills.

Intervention duration: The durations of the experiments or interventions in these research studies vary, ranging from shorter periods like one course or 12 weeks to more extended durations such as one semester and even seven semesters. Some studies also specify the frequency of sessions, such as 12 weekly two-hour sessions, providing a detailed framework for the intervention timelines. This range of durations allows for a thorough investigation of the impacts of AI tools over both short and long-term periods.

Research results: The research results indicate that AI-powered writing tools significantly enhance various aspects of English writing. Notable improvements were observed in vocabulary, grammar, organization, and content. Both human methodologies and AI tools were found to improve students' competency in English writing, with AI assistance positively impacting writing motivation, self-efficacy, engagement, and collaborative writing tendencies.

ChatGPT emerged as an effective solution for overcoming writing challenges, enabling students to produce work more efficiently and quickly.

Automated paraphrasing tools (APTs) also had a significant impact on the academic writing process, with experimental participants showing better performance compared to their control group counterparts. Specifically, the experimental groups demonstrated significant improvements in writing outcomes, engagement, and feedback literacy.

Quillbot was highlighted for its role in improving writing quality, fostering positive attitudes toward writing, and aiding language development through its user-friendly features.

Overall, AI-powered writing tools were recognized as valuable for English language learners, promoting learning behavior and attitudinal technology acceptance, and providing structured assistance to enhance writing skills.



Table 4Synthesized articles distributed by limitations, recommendations for application, and recommendations for further research

Author	1/10/2011	Recommendation for	Recommendation for
	Limitation		
(Publication years)		application	further research
	There are concerns	ChatGPT is effective	New forms of writing
	about fairness in	in providing timely	performance
	evaluation of	feedback to EFL	assessment should be
	writing.	English majors in an	invented in EFL
Tsai, Lin, & Brown		affordable manner.	composition classes
(2024)		We should note that	in this AI era.
		ChatGPT-assisted	
		revisions do not	
		reveal learners'	
		writing competence.	
	The possibility of	Educators should	Future research should
	bias in self-	provide	incorporate
	reported data and	individualized	more objective
Herwanis, Zakaria,	the limited	assistance and	indicators of writing
Rusmiati & Wahyuningsih	applicability of the	cultivate self-reliance	proficiency and
(2024)	findings to other	skills through	increase the sample
	populations.	technology.	size to encompass a
			wider spectrum of
			learners.
	The specific	Implications for EFL	
	context restricts the	writing teachers to	
T (2024)	generalizability of	integrate ChatGPT	
Teng (2024)	the findings.	into their teaching	
	The study focused	practices.	
	on two assignments		



Author (Publication years)	Limitation	Recommendation for application	Recommendation for further research
	within a single		
	course.		
	The results could		
	be influenced by		
	social desirability		
	or other factors.		
	The weakness in	The use of ChatGPT	
	using ChatGPT in	in education must be	
	academic writing is	managed wisely	
	that students face	and strengthened by	
	difficulties in	developing	
	controlling	independent writing	
	and modifying the	skills.	
Artiana & Fakhrurriana	output produced by		
(2024)	ChatGPT to match		
	the expected		
	academic writing		
	style.		
	100		
		Students	Further research and
		must not overly rely	guidance on the
Aleman & A (2022)		on APTs.	appropriate use of
Alammar & Amin (2023)			APTs may be
			necessary to help
			students



Author (Publication years)	Limitation	Recommendation for application	Recommendation for further research
(Fuoncation years)		аррисацоп	utilize them effectively.
Marghany (2023)		The implementation of AI-Grammarly-based instruction to teach FL essay writing skills should be supported by the FL instructor' explanation, clarification and simplification.	A study may investigate the impac of AI-based Grammarly on students' motivation and attitudes towards learning FL essay writing.
Rad, Alipour, & Jafarpour (2023)		Wordtune's application should be used in writing instruction.	
Kurniati & Fithriani (2022)		EFL writing instructors incorporate this tool into their English writing classroom.	Future research should focus on the effects and challenges associated with using Quillbot.
Gayed, Carlon, Oriola, & Cross (2022)	Several confounding factors could have influenced the negative outcome.		Next studies using Al or other predictive text digital writing tools should study the impact they might have on student



Author	T *********	Recommendation for	Recommendation for further research	
(Publication years)	Limitation	application		
¥			writing.	
	-AI learns from	-AI provides	There would be value	
	given data.	learning	in	
	-Lack of the	effectiveness,	adding qualitative	
	supports to	satisfaction, and	approach into future	
	teachers in the	efficiency.	trials to establish the	
Nazaria, Shabbir, &	integration of AI	-Tech-powered digital	AI Applications'	
Setiawan (2021)	technologiesAI	tools can support	acceptability for both	
	competencies and	students to become	teachers and students.	
	standard literacy	self-directed learners.		
	must be determined			
	specifically.			

Limitations: The research faced several limitations, including concerns about fairness in the evaluation of writing and potential bias in self-reported data, which may limit the applicability of the findings to other populations. The specific context of the studies restricts the generalizability of the results, as some focused on only two assignments within a single course. Additionally, the results could be influenced by social desirability or other external factors. A notable weakness in using ChatGPT for academic writing is the difficulty students face in controlling and modifying the output to match the expected academic writing style. Other limitations include several confounding factors that could have influenced negative outcomes, the dependency of AI on given data, lack of support for teachers in integrating AI technologies, and the need to determine specific AI competencies and standard literacy. Recommendations for application: The recommendations for applying AI-powered writing tools in education emphasize the effective use of ChatGPT for providing timely and affordable feedback to EFL English majors. However, it is important to recognize that ChatGPT-assisted revisions do not fully reveal learners' writing competence. Educators should focus on providing individualized assistance and fostering self-reliance skills through technology. Integrating ChatGPT into teaching practices requires



careful management to ensure that students develop independent writing skills and do not overly rely on automated paraphrasing tools (APTs).

For teaching foreign language (FL) essay writing skills, AI-Grammar-based instruction should be complemented by the instructor's explanations, clarifications, and simplifications. Similarly, Wordtune's application can be effectively used in writing instruction, and EFL writing instructors are encouraged to incorporate this tool into their classrooms. English writing instruction can take significant benefits in terms of learning effectiveness, satisfaction, and efficiency, and can support students in becoming self-directed learners.

Recommendations for further research: In the context of EFL composition classes, it is essential to develop new writing performance assessments that reflect advancements in artificial intelligence (AI). Future research should focus on incorporating more objective indicators of writing proficiency and expanding the sample size to include a diverse range of learners.

Investigations into the effective use of Automated Writing Evaluation Tools (APTs) is necessary to support student engagement with these resources. Specific studies could examine the impact of AI-based tools like Grammar on student motivation and attitudes towards foreign language essay writing, as well as the effects and challenges associated with tools like Quillbot.

Moreover, subsequent research should explore the influence of AI and predictive text writing tools on student writing outcomes. Finally, integrating qualitative approaches into these studies will provide valuable insights into the acceptability of AI applications for both teachers and students.

Discussions and Conclusion

AI writing assistants and language models have made notable progress. The findings align with previous research, suggesting that AI is unlikely to replace academic writing in the near future. Instead, a balanced approach may involve using AI assistants as supplementary tools to enhance specific aspects of the writing process, while still prioritizing human instruction and guidance (Wongras & Tanantong, 2023). Ultimately, the role of AI in academic writing instruction may continue to develop, but human instructors and their expertise in teaching the complexities of academic discourse are expected to remain crucial components of university-level writing education (Teng et al., 2022).



The effects of AI-powered writing helpers on English writing was investigated in this systematic review. The findings imply that AI can help with activities like text production, plagiarism detection, and grammar correction. The profound comprehension and critical thinking abilities that academic writing courses seek to foster, however, cannot be fostered by AI tools. These writing courses emphasize critical components of academic writing that AI technologies do not have: creative thinking, convincing reasoning, and accurate referencing. AI is more likely to be employed as an additional tool to improve students' writing skills and learning. It is anticipated that AI's function would develop to assist learning while resolving moral dilemmas pertaining to authorship, privacy, plagiarism, and originality. A well-rounded strategy that carefully incorporates AI to enhance conventional teaching, instead

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A Study of the Elements of Strengthen Servant Leadership of Department Head of Universities'

Library in Nanning, Guangxi

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Abstract

The purpose of this study was to explore the elements of Servant Leadership of Department Head of Universities' Library in Nanning, Guangxi. The research selected the factors with high frequency, this paper synthesizes from 10 literatures and researches on the factors of Servant Leadership of Department Head of Universities' Library. Research results was found 5 factors from as: Shared vision, Altruism, Authorize, Listening, Collaborative. The research field is concentrated on university libraries in Nanning though the paper, and promote the continuous progress and development of university libraries in Nanning.

Keyword: Servant Leadership, Department head

Introduction

The Chinese government has always regarded the library industry as an important component of cultural and educational undertakings, investing financial funds to build a widely covered and interconnected library system. By the end of June 2024, there are 2868 ordinary higher education institutions in China, including 1308 undergraduate institutions, all of which have established libraries.

As an important component of universities, the three main functions of Chinese university libraries are to provide support for university teaching, support for scientific research, and preserve academic resources. With the continuous changes in internal and external technological and economic factors, libraries have been making unremitting efforts in collection construction,



resource sharing, user services, quality education, and library management to coordinate and utilize these resources effectively. Theoretical research and practical applications are developing in depth and breadth.

With the continuous development of the university library industry, the level of knowledge and specialization of librarians is increasing. The traditional leadership style characterized by control is becoming increasingly unsuitable for the development needs of contemporary university libraries. Instead, service-oriented leadership characterized by altruism, serving others, reasonable authorization, and serving people and assuming social responsibility has emerged. Service oriented leaders in university libraries should try their best to solve problems for librarians, provide services, trust, develop, empower and motivate librarians, give full play to their autonomy and creativity, improve the performance of their work, and build a service-oriented university library.

The researcher interests in studying the servant leadership of department heads in university libraries in Nanning, China, and hope to strengthen the servant leadership of department heads in university libraries in Nanning though the paper, and promote the continuous progress and development of university libraries in Nanning.

Research Objectives

To study the elements of Servant Leadership of Department Head of Universities' Library in Nanning, China.

Research Methodology

In order to achieve the purpose of the research, the investigate the elements of Servant Leadership of Department Head of Universities' Library in Nanning, Guangxi. The research selected several experts in the field and analyze the suitability of each element by questionnaire. As follow steps:

- 1. Study of documents, textbooks, and research relevant to Servant Leadership of Department Head of Universities' Library in Nanning, Guangxi.
- 2. Synthesized data from 1 to obtain the elements of t Servant Leadership of Department Head of Universities' Library in Nanning, Guangxi.



3. Examine the appropriateness of the elements of Servant Leadership of Department Head of Universities' Library in Nanning, Guangxi.5 Chinese experts by questionnaire.

Research Results

Robert K. Greenleaf is the founder of 'Servant Leadership', which was first introduced in 1970. This leadership philosophy emphasizes that the primary task of a leader is to serve others, rather than pursuing personal power or status. He believes that the main elements of servant leadership include 1) altruism. The essence of servant leadership is to 'serve others', which is also the primary task. This is in stark contrast to traditional authoritative leadership; 2) Servant leaders are good at listening. They establish a trusting and open communication environment by paying attention to the voices of team members, understanding their needs and perspectives; 3) Empathy: Servant leaders are able to empathize with others. They strive to identify with employees' feelings and demonstrate support and care when facing problems; 4) Healing leaders should be committed to repairing relationships or relieving stress on team members, helping them recover and grow psychologically and emotionally; 5) Persuasion: Servant leaders influence others through non coercive means. They use persuasiveness rather than authority to guide the team towards achieving their goals; 6) Foresight leaders need to have the ability to perceive the future, predict possible outcomes based on past experience and current trends, and prepare the team accordingly; 7) Commitment to the Growth of People: Servant leaders focus on the personal growth of team members, including professional abilities, psychological development, and quality of life; 8) Building Community: Servant leaders are committed to creating a work environment that is full of a sense of belonging, allowing team members to feel secure and supportive of each other.

Spears (2004) according to the definition of spears, servant leadership are good at listening, farsighted, concerned about the growth of employees, compassionate and so on.

Farling et al. (1999) passed the 12 key factors affecting service-oriented leadership are analyzed and summarized into three dimensions: empowerment, service and vision.

Ehrhart. (2004) proposed multiple dimensions to measure servant leadership in his research and verified it through empirical research. These dimensions include: Establish a friendly relationship between leaders and employees: establish a positive and friendly relationship between leaders and employees to promote communication and cooperation. Empowerment: leaders give



employees power and responsibility, and encourage employees to participate in decision-making and self-management. Help employees develop and succeed: leaders pay attention to employees' career development and personal growth, provide support and resources, and help employees achieve their career goals. Abide by ethics: leaders set an example for employees by following high standards of ethics. Conceptual thinking: leaders have broad vision and in-depth thinking ability, and can formulate long-term strategies and plans. Put the interests of employees in the first place; leaders put the interests of employees in the first place, pay attention to the needs and welfare of employees, and create a positive working environment. Create value for the community: leaders actively participate in community activities, create value for employees and society, and enhance the reputation and image of the organization. In addition, Ehrhart also put forward four dimensions to measure servant leadership in another study, including supportive leadership, incentive leadership, intellectual incentive leadership and individualized care. These dimensions overlap with the above seven dimensions, but focus more on the specific behavior and support of leaders.

Russell and Stone (2002) proposed 9 functional attributes and 11 accompanying attributes of servant leadership, including vision, honesty, integrity, trust, service, role model, professionalism, appreciation of others, authorization, and accompanying attributes include communication, trustworthiness, ability, management, visibility, influence, persuasion, listening, encouragement, guidance, representation.

Liden (2014) consists of 28 measurement items to form seven dimensions of servant Leadership: emotional comfort, thinking ability, value creation, behavior ethics, reasonable empowerment, helping employees grow and giving priority to employees

Van Dierendonck (2011) concludes with another conceptual model, which identifies six key characteristics of servant leadership: empowering and developing people, humility, authenticity, interpersonal acceptance, providing direction, and stewardship.



Analysis table of elements of servant leadership

Serial	Expert'	elements of servant leadership				
number	name	Shared vision	Altruism	Authorize	Listening	Collaborative
1	Greenleaf	√	✓	✓	√	✓
2	Spears	√	✓	√	√	√
3	Farling	√	✓	√	✓	
4	Ehrhart.	✓	✓	√	✓	✓
5	Russell & Stone	✓	✓	√		✓
6	Liden	√	\checkmark	√	√	
7	Van Dierendonck	✓	✓	√		√

In summarized based on the previous research results and taking into account the background of Chinese university libraries, this study summarizes elements of Servant Leadership of Department Head of Universities' Library in Nanning, Guangxi into five dimensions, as follow:

1) Shared vision 2) Altruism 3) Authorize 4) Listening and 5) Collaborative.

Shared vision

Shared vision refers to the team leader continuously sharing and pursuing a vision of the future, enhancing the cohesion of team members, guiding them to strive towards a common goal, and achieving greater success and achievements.

Altruism

Altruism refers to the leaders who voluntarily transcend personal interests and contribute to the overall interests of the team or organization in an organizational and work environment. This behavior is manifested in that leaders not only focus on their own tasks and responsibilities at work, but also take the initiative to help colleagues, share information, provide support and assistance to promote the success of the team and the achievement of organizational goals.



Authorize

Authorize refers to the leader's respect, appreciate, and recognize their subordinates, delegate tasks and distribute authority within the organization, and provide employees and subordinates with greater autonomy to achieve organizational goals. Delegation is considered an extension of a leader's wisdom and abilities.

Listening

Listening refers to the leaders means listen to their subordinates' opinions and feedback.

Managers can better understand subordinates' needs and expectations, thereby improving their job satisfaction and performance.

Collaborative

Collaborative refers to the process where team members, in pursuit of a shared goal, work together by reasonable division of labor, communicating efficiently, fostering mutual trust, and encouraging and supporting one another.

Research status

At present, the research on the development of servant leadership in Chinese university libraries is still limited to qualitative analysis and clarification of the concept of leadership and specific environment. There are relatively few papers studying servant leadership in university libraries. The department head of the universities' library are not only the managers and decision-makers of the department's work, but also the bridge for communication between library leaders and librarians. Their leadership has a direct and important impact on the quality and efficiency of various library work execution. Therefore, based on this, empirical investigation and scientific quantitative analysis, including leadership development and the organizational development it promotes, as well as corresponding improvement plans, are particularly urgent.

Discussion and Conclusion

The adoption of servant leadership in university libraries can play a positive role in many aspects, which is specifically reflected in the following dimensions:



1. Significantly improve the job satisfaction of department leaders

The servant leadership model takes employees as the core, pays close attention to employees' needs and growth, and can significantly improve employees' job satisfaction. This leadership model emphasizes the sincere awakening, emotional listening, spiritual resonance and wisdom inspiration of employees, which helps to build a positive working atmosphere and make employees satisfied with and identify with their work. When employees feel valued and respected, they are more likely to be enthusiastic about their work, thereby improving overall job satisfaction.

2. Effectively strengthen the relationship between department leaders and employees

Servant leaders can gain the full trust of team members by serving the team members wholeheartedly, meeting the reasonable needs of team members, so as to strengthen the psychological atmosphere and relationship quality between leaders and employees. This trust and support is the foundation of teamwork and efficient work. When a solid trust relationship has been established between leaders and employees, team members are more willing to share information, put forward suggestions, and show higher enthusiasm and participation in work.

3. Significantly promote department and team performance

Servant leadership focus on the personal growth and development of employees, and help employees realize their self-worth by providing training opportunities, stimulating work enthusiasm and creativity. This leadership style can enhance employees' sense of responsibility and mission, improve their work efficiency and performance, and then promote the performance of the whole team. When employees feel that their growth and development are valued, they are more likely to put more efforts and enthusiasm into their work, so as to promote the improvement of team performance.

4. Effectively improve the behavior of library staff

Servant leadership can stimulate employees' civic behavior, that is, employees' voluntary contribution to the library, care about the development of the library, and actively participate in library activities. This kind of civic behavior helps to enhance the cohesion and centripetal force of the library and promote the sustainable development of the library cause. When employees feel that they are part of the library family, and their contributions are recognized and valued, they are



more likely to show positive civic behavior, so as to make greater contributions to the development of the library.

5. Significantly reduce workplace deviant behavior

By paying attention to the needs and feelings of employees and giving timely care and support, servant leadership can reduce employees' workplace deviation behavior. Such deviant behaviors include being late, leaving early, absenteeism, slacking off, etc., which have a negative impact on the operation and image of the library. Servant leadership can help reduce the occurrence of these behaviors by creating a positive working atmosphere and providing necessary support. When employees feel cared for and supported, they are more likely to abide by work norms and show good professional behavior.

In summarize, the servant leadership mode adopted by the Department Head of Universities' Library plays a positive role in improving the job satisfaction of employees, strengthening the relationship between leaders and employees, promoting the personal and team performance of employees, improving library citizenship behavior and reducing workplace deviation behavior. This leadership style will help promote the sustainable development and innovation of the library cause of higher education institutions, and lay a solid foundation for the long-term development of libraries.

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A study of the element for Strengthen Team Leadership of Undergraduate Students in Comprehensive Arts Universities, China

WangYue, Kriangsak Srisombut and Wichit Kammantakun

Abstract

This study aims to explore the key element for Strengthen Team Leadership of Undergraduate Students in Comprehensive Arts Universities, China. Through literature review, policy document analysis, and expert interviews, five core elements of team leadership are identified: Vision, Communication, Motivation, Delegation, and Adaptability. The findings align with national goals of cultivating high-caliber interdisciplinary talents to meet the demands of modern cultural and creative industries. This study provides significant theoretical foundations and practical strategies for enhancing team leadership training in comprehensive arts universities and offers new perspectives for advancing reforms in arts education.

Keyword: Team Leadership, Strengthen Team Leadership, Comprehensive Arts Universities

Introduction

In recent years, China's higher education in the arts has experienced significant expansion, with an increasing number of arts institutions and enrolled students. However, alongside this quantitative growth, enhancing education quality to meet the demands of the modern cultural and creative industries has become a critical challenge. In comprehensive arts universities, cultivating students' teamwork and leadership skills has emerged as a vital approach to addressing these challenges. However, the first and foremost task is to accurately identify the core elements of team leadership, providing a clear theoretical framework and practical guidance for educational reform.



The Chinese government has introduced a series of policy documents in recent years, emphasizing the alignment of talent cultivation with national development strategies. The Education Powerhouse Construction Plan (2024–2035) calls for promoting categorized management and comprehensive reform in higher education, focusing on cultivating interdisciplinary collaboration skills and innovative thinking. Meanwhile, the Opinions on Strengthening and Improving Aesthetic Education in the New Era highlight the integration of artistic practice into education systems and emphasize the importance of practical skills and cooperative spirit. These policies have not only outlined the developmental direction for comprehensive arts universities but also underscored the significance of team leadership in interdisciplinary talent development.

Traditional arts education has typically centered on individual skill development and artistic expression, with limited attention given to fostering students' teamwork and leadership capabilities. However, with the rapid development of the cultural and creative industries, modern arts projects increasingly depend on interdisciplinary team collaboration. Team leadership, as a critical ability to integrate individual creative strengths into collective goals and drive team cooperation, has become an essential competency for arts students to tackle future challenges. Therefore, understanding the core elements of team leadership not only enriches theoretical research in arts education but also provides targeted directions for educational practice.

This study aims to explore the core elements of team leadership among undergraduate students in comprehensive arts universities. Through literature analysis, policy document interpretation, and expert interviews, the study identifies and analyzes key components of team leadership, including vision, communication, motivation, delegation, and adaptability. The primary focus of this research is to clarify the nature and interrelations of these elements, rather than to delve into the detailed application of these elements in practice. The findings are expected to lay a theoretical foundation for optimizing educational design and management, while also addressing the cultural and creative industries' demand for skilled arts professionals.

Objective

To Investigate the Elements of Team Leadership of Undergraduate Students in Comprehensive Arts Universities.



Research Methodology

This study adopts a systematic research approach to identify the core elements of team leadership among undergraduate students in comprehensive arts universities. The methodology consists of the following steps:

1. Literature Review

A comprehensive review of domestic and international theories, academic literature, and policy documents on team leadership was conducted. The review aimed to summarize leadership elements relevant to arts education and the cultural and creative industries, forming an initial framework of potential elements.

2. Policy Document Analysis

National policy documents, such as the Education Powerhouse Construction Plan (2024–2035) and the Opinions on Strengthening and Improving Aesthetic Education in the New Era, were analyzed to identify the educational goals and directions for cultivating team leadership. This analysis provided a policy foundation for understanding the requirements and expectations for leadership development in arts universities.

3. Expert Interviews

Semi-structured interviews were conducted with experts from the fields of arts education, cultural and creative industries, and leadership studies. The goal was to refine and validate the leadership elements identified in the literature review, incorporating practical insights and industry needs. Thematic analysis was applied to the interview data, resulting in the identification of five core elements of team leadership: Vision, Communication, Motivation, Delegation, and Adaptability.

Research Results

This study systematically identifies five critical competencies for team leadership among undergraduate students in comprehensive arts universities in China: Vision, Communication, Motivation, Delegation, and Adaptability. These competencies constitute a dynamic and collaborative system that provides strategic direction, communication support, motivational activation, operational efficiency, and flexible responsiveness in team settings. They serve as foundational pillars for team operations within the context of arts disciplines.



1. Vision

Vision is the core driving force of team leadership, enabling teams to establish clear objectives and foster cohesion. The study highlights that vision is particularly significant in arts projects, as it provides strategic goals and long-term planning for teams. However, many students tend to focus on short-term tasks or outcomes (e.g., completing a specific project or exhibition) and lack systematic thinking about the overall objectives of the team. This deficiency in strategic thinking limits their potential to assume leadership roles within teams and hinders the coordinated advancement of complex projects.

2. Communication

Communication is vital for effective teamwork, especially in the interdisciplinary teams of comprehensive arts universities. The study finds that students from different arts disciplines (such as drama, music, fine arts, and design) often exhibit significant differences in language expression, creative styles, and working methods. These differences frequently lead to information distortion and reduced efficiency in team collaboration. While some students demonstrate strong communication skills within their disciplines, they often lack openness and inclusivity in interdisciplinary teams, making it difficult to establish effective communication bridges. This, in turn, undermines trust among team members and diminishes the team's innovative potential.

3. Motivation

Motivation reflects the leader's ability to inspire team members and sustain their enthusiasm. The study reveals that arts students often rely on short-term or external motivational strategies, such as boosting morale through awards or showcasing achievements. However, such approaches frequently neglect the intrinsic psychological needs of team members (e.g., goal resonance and emotional support). Teams lacking long-term motivational mechanisms and emotional engagement are more likely to lose cohesion during collaboration, leading to decreased innovation and reduced efficiency in teamwork.

4. Delegation

Delegation is an indispensable aspect of team management, requiring leaders to assign tasks effectively based on team members' strengths and capabilities while granting them adequate autonomy. The study finds that many students exhibit extreme behaviors in delegation, either exercising "overcontrol" or adopting a "laissez-faire" approach. These practices not only impair



team efficiency but also weaken members' sense of responsibility and engagement. Furthermore, insufficient understanding of team members' abilities often results in unreasonable task allocation, further limiting the overall performance of the team.

5. Adaptability

Adaptability is the ability to adjust strategies flexibly in rapidly changing environments, a critical skill for addressing uncertainties and external changes in arts projects. The study indicates that many students tend to rely on established patterns when confronted with change, lacking the awareness and methods needed for proactive adjustments. This inadequacy in adaptability reduces the team's responsiveness and constrains students' ability to learn and grow in complex environments.

Discussion and Conclusion

This study systematically analyzes the five key competencies of team leadership, not only revealing their constituent elements but also highlighting the deficiencies in current educational practices and areas for improvement.

Firstly, the lack of Vision reflects a shortfall in strategic thinking training within the current education model. Arts curricula often prioritize task completion and showcasing works, neglecting the cultivation of team goal-setting and long-term value planning. This educational tendency limits students' ability to assume strategic roles in team leadership, leaving teams without clear direction in complex projects.

Secondly, improving Communication faces challenges in the context of interdisciplinary collaboration. While arts universities provide opportunities for cross-disciplinary cooperation, the courses and practical activities fail to effectively address differences in language and thought processes between disciplines. Students in interdisciplinary teams often lack inclusivity and coordination skills, which hinders the establishment of trust and reduces the efficiency of collaboration within teams.

The deficiency in Motivation highlights the lack of attention to emotional support and psychological needs. Current educational practices focus more on external motivators, such as winning competitions and showcasing works, while neglecting guidance on goal resonance and



long-term emotional engagement. Although this approach can temporarily boost team morale, it has a negative impact on team cohesion and long-term creativity.

The shortcomings in Delegation and Adaptability reflect the disconnect between curriculum content and practical application. Students often lack clear guidance on task allocation and decision-making authority, leading to inefficiencies in management. Similarly, the deficiency in adaptability indicates an absence of dynamic environmental simulations in teaching models, resulting in students being ill-prepared to flexibly adjust when faced with uncertainties in real-world projects.

Conclusion

Although comprehensive arts universities in China have established some support systems in terms of policies, curricula, and student organizations, the lack of effective top-level design, implementation strategies, and resource integration has hindered their full potential. Consequently, the effectiveness of team leadership training remains suboptimal. The five competencies, as a dynamic and collaborative framework, provide teams with clear strategic direction, effective communication support, intrinsic motivational drive, efficient execution, and flexible adaptability. This framework not only offers new perspectives for theoretical research in team management but also provides clear directions for improving the practice of arts education.

Suggestion

Based on the systematic analysis of the five core elements of team leadership—Vision, Communication, Motivation, Delegation, and Adaptability—this study proposes recommendations from four dimensions: top-level design, cultivation process, teaching practices, and technological support. These recommendations aim to further clarify the connotations and functions of these key competencies, scientifically position their application in the education system, and promote the integration of theory and practice in arts education.

1. Improve Top-Level Design and Promote Systematic Integration

To meet the demands of the cultural and creative industries for team leadership, efforts should begin with optimizing top-level design to enhance the scientific rigor and effectiveness of policy execution, ensure rational resource allocation, and facilitate smooth collaboration among



departments. Specifically, the responsibilities of academic affairs offices, student affairs offices, practice bases, and university-industry collaboration platforms should be clearly defined. Establishing cross-departmental coordination mechanisms is essential to ensure efficient policy implementation from planning to execution.

Furthermore, cultivation objectives should be dynamically adjusted based on industry development trends. A phased training pathway should be designed to cover different learning stages from freshman to senior year, with a focus on progressively deepening educational content around the five core competencies of Vision, Communication, Motivation, Delegation, and Adaptability. Additionally, leveraging big data and artificial intelligence technologies can facilitate the construction of dynamic evaluation mechanisms to track students' leadership development in real-time, providing scientific feedback and decision-making support. This foundation will ensure effective policy adjustments and optimization of educational practices.

2. Optimize Curriculum Design to Strengthen the Integration of Theory and Practice

The curriculum system should be enhanced to explicitly target the cultivation of the five core competencies while providing practical support. Scenario simulations and case-based teaching should be integrated into existing courses, such as career planning and arts management, allowing students to improve Vision, Communication, and Delegation skills by addressing real-world issues like goal setting, resource allocation, and team conflicts in arts projects.

A modular teaching approach is recommended to divide the five competencies into independent learning units. For example:

- The Vision module should emphasize strategic planning and goal-setting practices.
- The Communication module should focus on cross-disciplinary collaboration and dialogue training.
- The Motivation module should highlight emotional support and goal resonance strategies.

By incorporating interdisciplinary content from arts and management, practical tasks such as exhibition planning and performance management can be embedded into courses, enabling students to apply leadership skills in realistic scenarios.



3. Leverage Emerging Technologies for Personalized and Dynamic Training

Emerging technologies should be utilized to enhance the precision and flexibility of team leadership training, offering students personalized and dynamic learning experiences. First, an AI-based personalized learning platform should be developed to analyze students' assessment results (e.g., MBTI, DISC) and practical performance, recommending tailored resources and projects that align with their development needs.

Second, dynamic evaluation and feedback systems leveraging AI should be built to monitor students' performance in team projects in real-time. Metrics such as communication efficiency, task allocation effectiveness, and adaptability can be tracked, providing instant feedback and actionable suggestions to help students continuously refine their leadership skills.

Third, Virtual Reality (VR) technology can be introduced to simulate complex scenarios, such as resource allocation, cross-cultural conflicts, and adaptive decision-making in dynamic environments. Immersive challenges in VR can enhance students' adaptability and communication abilities, improving the efficiency and effectiveness of team leadership training while fostering innovation in educational models.

4. Strengthen Practical Support by Deepening University-Industry Collaboration and Student Organizations' Roles

Practical support is a critical approach to cultivating core competencies in team leadership. This should be advanced through dynamic scenario simulations, university-industry collaboration, and the effective management of student organizations. Tailored leadership training programs should be designed for student councils, clubs, and self-governance committees, supported by internal and external mentors. These programs can provide opportunities for students to develop Vision and Communication skills through hands-on management experiences.

Collaborations with cultural and creative enterprises can help develop long-term practice projects, such as participating in arts exhibitions, brand planning, or interdisciplinary creative activities. These projects enable students to experience leadership roles in real-world settings, improving Delegation and Adaptability skills. Additionally, establishing regional practice bases in cultural and creative industry clusters can offer diverse interdisciplinary internship opportunities. Combining these with entrepreneurial support and mentorship, these platforms will not only



cultivate students' Vision and Delegation abilities but also enhance their adaptability in dynamic and complex team environments, fostering comprehensive personal development.

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Learning Ecosystem for Student Learning Development in the 21st century

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Abstract

Currently, education is affected by various changes, particularly in technology and society, leading to the need for new approaches in teaching and learning management to keep up with the times. Designing effective learning processes is essential. It is essential to consider learning management and the creation of an appropriate learning ecosystem as well. Therefore, the ideas regarding the importance, principles, components, and interconnectedness of learning management and the creation of a learning ecosystem to develop learners are presented. That requires a learning process that draws on collaborative learning resources from various sectors. The use of technology to support learning aims to provide learners with the opportunity to learn throughout their lives and anytime, anywhere. From the study of creating a learning ecosystem and managing learning, it was found that. There is a connection when educational institutions organize learning and create a good learning ecosystem, which leads to effective learning management within the institutions. And it has resulted in effectiveness in the development of learners.

Keyword: Building a learning ecosystem, Development student learning, Learners in the 21st century

Introduction

In the 21st century, the world is changing rapidly, making it impossible for learners to fully absorb knowledge. Therefore, education systems should focus on providing learners with tools to create knowledge by themselves and to filter information effectively. The Thai education



system faces challenges in terms of quality, standards, and equity, as well as a lack of agility in management and educational inequality. The Secretary-General of the Education Council (2021) developed the National Education Plan (2017-2036) to establish goals and directions for the country's education system. This plan emphasizes ensuring that all Thai people have access to quality education opportunities, with a focus on developing education in five main areas:

1) Access to quality education for all, 2) Educational equity, 3) Education systems that help learners achieve their highest potential, 4) Efficient management, and 5) Adaptation to global changes.

21st-century learning experiences arise from the interaction between learners and their surroundings, influencing both formal and informal learning processes. Learning is no longer confined to classrooms or curriculum boundaries but includes interactions with friends, family, communities, and technologies (Holgado & Penalvo, 2017). In order to prepare learners for a rapidly changing world, developing a learning ecosystem is crucial for supporting effective and future-ready learning. A learning ecosystem is a structure that integrates various factors affecting learners' education, such as teachers, students, technology, family support, communities, and environments conducive to learning. Creating an appropriate learning environment is essential to developing learners in all dimensions, including knowledge, social skills, critical thinking, technological proficiency, and teamwork abilities. The learning ecosystem also extends beyond the classroom to encompass real-life learning experiences, such as community involvement, online learning, or experiences related to nature and the environment. A learning ecosystem is about fostering collaboration and connecting different learning sources to ensure that learners can learn anywhere, anytime, and develop according to their individual interests and abilities.

Creating a learning ecosystem in educational institutions is crucial for developing learners' skills and preparing them for the challenges of the future. It is essential to establish a flexible and sustainable learning environment that allows everyone to learn anytime, anywhere, without being restricted by physical spaces or time constraints, through the use of digital technology such as online platforms and remote learning tools. Additionally, learning should occur in safe spaces free from bullying, where diversity is respected, to ensure confidence and promote the full potential of learners. Green spaces are vital in this ecosystem, emphasizing the connection to nature through outdoor activities, sustainable resource use, and raising



environmental awareness. This ecosystem helps create a society that supports high-quality learning while also promoting the learners' physical, mental, and spiritual well-being.

The Meaning of Learning Ecosystem

A Learning Ecosystem has been widely adopted in the field of education as a key concept for enhancing learners' competencies in the future. All components, such as families, learning sources, media, technology, and policies, influence the learning process. The term "learning ecosystem" is derived from ecological terminology, referring to the interaction between living and non-living elements within an environment, where a change in one component affects other components. Various scholars and educators have defined the meaning of the learning ecosystem to suit contemporary contexts. Sopana Sutsomboon et al. (2023) define the learning ecosystem as a process of developing learners by designing and improving classroom environments that harmonize across school, home, and other learning spaces. This approach provides learners with flexible learning methods, differing from traditional Learning Management Systems (LMS), by fostering self-directed learning. A learning ecosystem is a system that supports an environment conducive to learning, enabling all members to develop to their fullest potential. It consists of five main components: 1) Students, 2) Families, 3) Schools, 4) Teachers/Instructors, and 5) Society/ Communities. Rose Benedicts (2018) defines a learning ecosystem as a collaborative group of individuals, processes, tools, and support systems integrated to deliver and facilitate learning throughout the organization. Hannon et al. (2019) further explain that a learning ecosystem refers to an entity that exists to deliver knowledge directly to learners by creating a group or knowledge resource that is immediately accessible to learners. This emphasizes the development of educators to be diverse and responsive to the specific needs of learners in different contexts.

In summary, a learning ecosystem refers to the interaction between various components related to the learning process, where changes in any component affect others. This concept is developed to suit the modern world and enhance learners' competencies for the future.

Creating a Learning Ecosystem

The importance of creating a learning ecosystem lies in developing lifelong learners, which is the ultimate goal of education. The learning ecosystem creates a society of continuous



learning, helping learners to be prepared for the changing world. The creation of a learning ecosystem must begin with three main steps: 1) Learn: Acquiring new knowledge, 2) Unlearn: Letting go of previous knowledge, and 3) Relearn: Re-examining previously learned concepts from a new perspective. To create a learning ecosystem using lifelong learning principles, each component should be developed as follows: 1) People: Learners need to find learning methods that suit them. 2) Content: The learning content includes both essential knowledge within the school curriculum and external learning related to personal interests, offering diverse learning forms. 3) Technology: Platforms such as Learning Experience Platforms (LXP) allow learners to develop skills outside mandatory subjects, through cloud-based systems. 4) Data: Data on learners' needs—such as what they want to learn, their interests, and areas of expertise—helps guide personalized learning. 5) Governance: Governance involves collaborative efforts to improve the ecosystem's components, including people, content, technology, and data.

The principles for creating a learning ecosystem in education, according to Atthitaya Saiyaphorn et al. (2024), involve essential elements such as collaboration with partners and networks, utilizing technology to connect learners with knowledge sources and innovations, designing curricula and activities that enhance self-development, and aligning learning processes with future workforce needs. This approach supports continuous learning and develops learners' competencies while promoting a culture of learning and collaboration within organizations.

Developing Learners' Learning Process

The development of learners' learning is a critical process in achieving the goals set by the curriculum. Educators should design learning processes that promote the quality of learners' skills, attitudes, and competencies. Kulisa Jitrchayawanich (2019) highlights that effective learning processes should involve learner participation in designing activities that respect individual differences and align with cognitive development. Learning activities should be diverse, modern, and age-appropriate, providing opportunities for learners to access various resources and engage in hands-on experiences. The Thai Basic Education Core Curriculum (2551) outlines key principles for effective learning: 1) Focusing on the learner, 2) Considering individual differences, 3) Aligning with cognitive development, and 4) Emphasizing moral and ethical learning through continuous development.



In conclusion, the development of learners' learning involves changes in knowledge, attitudes, behaviors, and the use of new technologies. Effective learning requires designing and implementing a suitable learning ecosystem to enable continuous personal and academic growth.

Summary of Practical Implementation in Educational Institutions

A learning ecosystem for the development of student learning allows students to learn anywhere, anytime, and by anyone. Educational institutions must start by adjusting teaching methods to ensure they are flexible and modern, using digital technologies such as online learning platforms, applications, or tools that promote borderless learning. Students can learn anywhere and anytime, without being restricted by the conventional classroom schedule. Creating a safe space within educational institutions is crucial for promoting confidence and safety among students, protecting them from bullying or any form of harassment. Promoting social skills and respecting diversity will help create an environment that supports quality learning and enables students to develop in ways that suit their individual potential. Furthermore, green spaces within educational institutions should be an integral part of the learning ecosystem, focusing on creating environments that support learning from nature, such as outdoor activities or raising environmental awareness in students. Using natural spaces in schools also strengthens the relationship between humans and nature, while promoting students' physical and mental health. Organizing learning activities in this way provides students with opportunities to develop knowledge, social skills, teamwork, and environmental responsibility skills that are essential in the 21st century. Implementing an open and flexible learning ecosystem in educational institutions will ensure sustainable learning and prepare students to adapt and succeed in a rapidly changing world with confidence. Therefore, the learning ecosystem is an important alternative in creating educational opportunities for students, not only to keep up with current changes but also to prepare students for growth and success in an uncertain and continuously changing future. Berri A. (2019)

Knowledge Gained

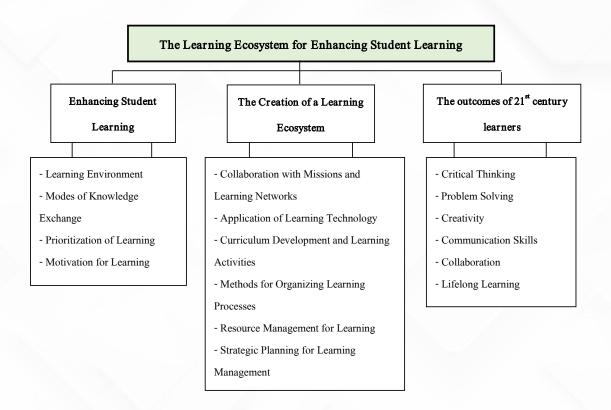
From studying the management of learning, the creation of a learning ecosystem, and the development of student learning, key findings have been identified. The components of managing



learning, building a learning ecosystem, and enhancing student learning are interconnected and interrelated. These relationships are illustrated in the following diagram.

Figure 1.

The Learning Ecosystem for Enhancing Student Learning





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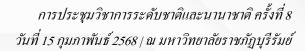
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School Management Towards Excellence: A Case Study of Mukdahan School

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ABSTRACT

The research on "School Administration Excellence: A Case Study of Mukdahan School" has 2 objectives: 1) to study the state of school administration towards excellence: A case study of Mukdahan School, and 2) to study the approach to school administration towards excellence: A case study of Mukdahan School. The research consisted of 2 phases as follows: Phase 1: To study the state of school administration towards excellence: A case study of Mukdahan School. The informants included 5 school administrators, teachers, school committee, alumni association, and parent association, totaling 127 people, who were selected using purposive sampling. The data collection instrument was a questionnaire on the state of school administration towards excellence: A case study of Mukdahan School, which was a 5-level rating scale. Data analysis Statistics used in data analysis include percentage, mean, and standard deviation. Phase 2: Study of the approach to school administration towards excellence: Case study of Mukdahan School The data were collected from 5 school administrators, 4 department heads, 8 subject heads, 10 student council representatives, 2 school committee members, 2 alumni associations, and 2 parent's associations, totaling 33 people. The group discussion was conducted using a discussion group. The data collection tool was an in-depth interview. The data analysis was conducted using content analysis combined with interpretive analysis. The statistics used in data analysis were percentage, mean, and standard deviation.

The research results found that: 1. The state of school administration towards excellence: Case study of Mukdahan School had high opinions. 2. The approach to school administration towards excellence: Case study of Mukdahan School consisted of 7 aspects: 1. Management: The



school operated using management technology (big data) to manage systematically, modernly, conveniently, and quickly. 2. Curriculum development: The school continuously developed the curriculum. The curriculum development that has the highlight of curriculum organization (Competency Curriculum) to be a world class standard school curriculum, introducing Active Learning and Thinking School concepts to enhance important skills for future students. 3. Teaching and learning management emphasizes creative learning, encouraging students to use Smart Phones, including the use of Technology in teaching and learning in Smart Classrooms. 4. Personnel development has organized training and study tours both domestically and internationally, developing teachers to be able to use technology in learning management effectively, integrating social media into learning management. 5. Network of cooperation: The school has a network of partners to participate in promoting and supporting, in order to develop the quality of education and promote student learning. Parents play an important role and participate in decision-making and solving various problems, curriculum development, including international cooperation networks, such as the United States and Taiwan. 6. Characteristics of graduates: It was found that students' academic achievements were higher than the national average in all learning subjects. Each year, at least 3 students pass the medical school exam, focusing on the Mini English Program (MEP). 100% of students continue their studies at Chulabhorn Science School, Mukdahan, showing the readiness of all students to continue their studies at a higher level. 7. Research and innovation: There is support and promotion for teachers to be innovative teachers, One Teacher One Innovation, as well as promoting students to be thinkers and innovators to create innovations, One Classroom One Project.

Keyword: School management towards excellence, guidelines for school management, Mukdahan School

Introduction

The direction of the National Education Plan 2017-2036 The Office of the Education Council has prepared the National Education Plan 2017-2036 to be used as a long-term strategic plan for educational agencies in the country to use as a framework and guideline for the development of education and learning for citizens of all ages from birth to life. The important



objectives of the plan are to focus on ensuring opportunities and equality in education and education for employment and income generation under the economic and social context of the country and the world, driven by innovation, creativity, and dynamism, so that Thailand can overcome the middle-income trap and become a developed country. Under the framework of the National Education Plan 2017-2036, the key points for achieving the goals of educational development have been determined in 5 areas: access to educational opportunities (Access), educational equality (Equity), educational quality (Quality), efficiency (Efficiency) and responding to the changing context (Relevancy) in the next 15 years (Secondary Educational Service Area Office, Mukdahan, 2566: 24). National Education Act 2542 (and amended No. 4, 2562) Section 6 Education management must be for the development of Thai people to be complete human beings in body, mind, intellect, knowledge and morality, with ethics and culture in life and can live with others happily. The policy of the Ministry of Education is committed to developing the quality of education standards by raising schools to international standards to be schools with quality management according to the criteria of the Office of the Basic Education Commission and developing to national quality standards, resulting in schools developing learners, curriculum and teaching processes, learning resources, environments and learning management that facilitate learners to learn by themselves. Oneself continuously throughout life, having a habit of wanting to learn, having the ability to think analytically, synthesize, solve problems, be creative, have morality, lead knowledge, love being Thai and have progress in being a quality global citizen (Secondary Education Office, 2017)

In an era of intense change and competition in all sectors, education is an important mechanism for developing the quality of life of the population and driving society towards progress. Schools, which are the main agencies in education management, play an important role in creating quality personnel to respond to the needs of society and changes in the world in the 21st century. However, the management of educational institutions to achieve such goals faces various challenges, such as developing the potential of personnel, readiness of resources, creating a learning environment conducive to development, and responding to the expectations of parents and communities. In the context of Thailand, secondary schools in many areas face complex problems, such as organizing quality teaching and learning, reducing educational inequality, developing essential skills for students in the digital age, and building a reputation for schools at



both the local and national levels. Educational institution management is a process of managing educational institutions in which administrators carry out activities or processes with the cooperation of administrators and those involved in education, with planning, diagnosis, ordering, control, and management to ensure that learners are of quality, knowledgeable, and have desirable characteristics in accordance with the intention of education management, consisting of 4 main tasks: academic administration, personnel administration, budget administration, and general administration (Samma Ratthanit 2560: 137). Applying theories and principles of organizational management to Successful educational administration is very important in the present era. In addition to theory, administrators must have a clear practical approach, a policy that sees indicators or indicators of abstraction. They must also have skills, especially in managing education in the 21st century to achieve success in the organization (Thirasak Upramai and Group. 2563: 52). The principles of quality control system activities The basic principles include developing people by having administrators take responsibility, accepting and respecting the membership of the organization, giving everyone an opportunity to show their abilities, and everyone having the same goal and being willing to work together to achieve that goal.

Mukdahan School is a large school in Mukdahan Province. It is an interesting example of educational institution management to achieve excellence with a commitment to develop the quality of education through effective management. Mukdahan School is one of the leading educational institutions in the province. It aims to develop students to have quality in terms of academics, morality, and life skills to prepare for the future. The school's operations are developed in all aspects, increasing the quality of teaching and learning to keep up with technological changes, developing teaching personnel to be able to transfer knowledge and inspire students, including resource management and creating cooperation with the community to support student learning. And with quality according to standards, there are operational processes and factors related to education management that can result in education management achieving its goals. With the guidelines for developing educational institution management to excellence, it makes the quality of students, the quality of teachers and personnel, and the quality of school management. School management is a process for developing effective results and resulting in the quality of school administration (Ministry of Education, 2561: 4).



This study aims to analyze and present the school administration guidelines that can drive Mukdahan schools towards excellence in both academic and administrative aspects, emphasizing the participation of school personnel, communities, and parents to create sustainability in the development of educational quality and promote the school to be a model of effective school administration at the national level. This study results can be used to develop the quality of students, teachers, and personnel, and the quality of school administration to achieve sustainable educational standards, including those involved in education administration to use the data to develop the quality of school towards excellence and develop educational administration to achieve the set goals effectively and sustainably.

Research objectives

- 1. To study the state of school administration towards excellence: a case study of Mukdahan School.
- To study the guidelines for school administration towards excellence: a case study of Mukdahan School.

Research Framework

The researcher has studied and researched from related research documents of academic researchers as well as theoretical concepts on the administration of educational institutions towards excellence, a case study of Mukdahan School. After that, it was synthesized in the research concept as follows:

Research Methodology

The researcher conducted a mixed methods research in 2 phases as followings:

Phase 1: Study concepts, theories, and research related to school administration towards excellence. Study the school administration towards excellence and a case study of a model school administration towards excellence at Mukdahan School.

Phase 2: Develop tools for data collection. Analyze data to summarize and discuss the results in 3 steps as followings:



- 1. Create an interview form for general conditions of the school and personnel responsible for excellent practices in each area and data on the school administration towards excellence at Mukdahan School. Then, submit it to experts to assess the content validity of the interview form from 5 experts and then revise the interview form according to the experts' suggestions to obtain a complete interview form.
- 2. Use the complete tool to interview the informants at Mukdahan School, which consisted of the director, deputy director, teachers, school committee, student council, parent association, and alumni association.
- 3. Analyze the collected data. Then summarize the results of the interview data on the school administration towards excellence, Mukdahan School and summarize the results of the interview on the school administration towards excellence, Mukdahan School.

Population and target groups

Population: Executives, teachers, 127 people, students of Mukdahan School, 2,190 people.

Target groups: 1 school administrator, 4 deputy school directors, 8 teachers, 70 student council members, 15 school committee members, 2 alumni association members, and 2 parents association members of Mukdahan School, totaling 102 people.

Scope of research: The research consists of 2 phases as followings:

Phase 1: Study of the state of school administration towards excellence: A case study of Mukdahan School. Data providers include: 5 school administrators, teachers, and school committee members. Alumni Association and Parent Association, 127 persons, were selected by purposive sampling.

Phase 2: Study of the School Administration Approach to Excellence: A Case Study of Mukdahan School. The informants were 5 school administrators, 4 department heads, 8 subject heads, 10 student council representatives, 2 school committee members, 2 alumni associations, and 2 parent's associations, totaling 33 persons, through group discussions.



Instruments used in the research

1. Questionnaire on the state of educational administration towards excellence, a case study of Mukdahan School, consisting of 1) Academic administration 2) Personnel administration 3) Budget administration 4) General administration, in the form of a 5-level rating scale, which will obtain data on the state of educational administration towards excellence as a whole, used in Phase 1

2. The interview form is an in-depth interview on the approach to educational administration towards excellence, a case study of Mukdahan School, consisting of 7 components:

1) Management 2) Curriculum development 3) Teaching and learning management 4) Personnel development 5) Collaboration networks 6) Graduate characteristics 7) Research and innovation, used in Phase 2

Construction and quality control of research instruments

1. Study the concept and principles of construction of instruments for collecting data from documents, textbooks, and related research to be a guideline for construction of research instruments. Present the research instruments created to 5 experts to check the quality and consider the appropriateness in various aspects and check the quality of the questions in terms of content validity. The researcher selects questions with a consistency value of 0.80-1.00.

2. Improve and revise according to the suggestions from the 5 experts. Test it out with a group with characteristics similar to the target group, 30 people. Find the quality of the instruments by analyzing the discriminating power using the Item total correlation method. The researcher selects questions with a discriminating power value of 0.22-0.77 and analyzes the reliability with a value of 0.871 by finding the alpha coefficient using the Cronbach method.

3. Improve and revise according to the suggestions of the experts. Then print the complete instrument for further data collection.

Data collection

1. The researcher collected data from the target group by requesting a letter from the Graduate School, Faculty of Education, Rajabhat University Ubon Ratchathani to the doctoral-level lecturers in the university. The school administrators graduated with a doctoral degree and



the specialized educational supervisors graduated with a doctoral degree. The researcher went to collect the data himself.

2. Data collection in the evaluation stage The researcher conducted in-depth interviews on the administration of educational institutions towards excellence: A case study of Mukdahan School by collecting the data himself.

Data Analysis

- 1. Data analysis uses content analysis in conjunction with interpretive analysis and uses statistics such as percentage, mean, and standard deviation.
- 2. Data analysis obtained from the questionnaires is done by calculating the mean and standard deviation of the opinion scores, which has 5 levels of criteria for interpreting the meaning of the calculated mean as followings:
 - 4.51-5.00 means the school administration is at the highest level of excellence.
 - 3.51-4.50 means the school administration is at the highest level of excellence.
 - 2.51-3.50 means the school administration is at the moderate level of excellence.
 - 1.51-2.50 means the school administration is at the least level of excellence.
 - 1.00-1.50 means the school administration is at the least level of excellence.
 - 3. Data analysis obtained from the interviews uses descriptive analysis.

Research results

1. Study on the state of school administration towards excellence: a case study of Mukdahan School

The state of school administration towards excellence of Mukdahan School is at a high level overall with an overall average of 3.63. When considering each item, it was found that academic administration and personnel administration overall had a high level of opinion with an overall average of 3.71, followed by budget administration with an average of 3.56 and general administration with an average of 3.54, respectively.

2. Study on the guidelines for school administration towards excellence: a case study of Mukdahan School has 7 aspects:



- 2.1) Management Mukdahan School has management that focuses on transparency and has a system in working by dividing work into 4 main groups: academic group, general administration group, personnel administration group, and budget and planning group, which is considered to be a systematic and clear distribution of work. The concept of work management using technology has been applied, such as using Google Site to store data and use in the collaborative work system (Big Data), allowing teachers and all personnel to access relevant information conveniently and quickly. In addition, the "Coffee Council" meeting held after the Flag raising activities are one of the strategies to create an open working atmosphere and promote the exchange of ideas between administrators and teachers to solve various problems in working together with teachers. Therefore, using technology to manage data and open meetings is a good way to increase work efficiency and reduce problems caused by traditional management.
- 2.2) In terms of curriculum development, Mukdahan School focuses on developing a curriculum that meets the needs of students and future trends by using the concepts of Active Learning and Thinking School in teaching and learning at levels 6, Mathayom 1 and 4, which reduces repetitive basic subjects and increases elective subjects that respond to students 'interests more. Developing a curriculum in this manner helps students have important skills for future life. The school continuously develops the curriculum, developing a curriculum that has a highlight of organizing the curriculum (competency curriculum) to be a world class standard school curriculum. The curriculum is important for education management because it determines the guidelines for organizing teaching and learning to include the specified goals. The curriculum is constantly developed to have content that is up to date with changes in society, economy, technology, and politics, allowing Mukdahan School to have a curriculum that meets the needs of students and the community.
- 2.3) In terms of teaching management, it is the development of skills in analytical thinking, creativity, and problem solving, which are important in the 21st century. It uses technology to enhance teaching and learning by supporting learners to focus on creative learning by using smartphones, including the use of technology in teaching and learning (Smart Classroom). This is considered a promotion of flexible and convenient learning. It is creative learning, in which the use of technology allows teaching and learning to proceed anywhere, anytime. Students can access information and various learning resources more conveniently and



can learn according to their own convenience and interests. It focuses on creating opportunities for students to participate in thinking and creating new innovations by organizing the project "1 Classroom 1 Innovation", which supports students in each classroom to invent and create valuable projects or products that meet the needs of society. It also promotes flexible learning by allowing learners to choose subjects according to their interests and potential. However, the school's problem is the lack of budget to purchase quality teaching equipment or media, which may cause teaching and learning to be unable to proceed to its full potential.

2.4) In terms of personnel development, Mukdahan School places the highest importance on developing teachers and personnel in order to improve the quality of education. It focuses on increasing the knowledge, skills, and potential of personnel in order to be able to work efficiently and participate in the development of the organization. The main goal is to increase the organization's competitiveness, create a good organizational culture, and retain quality personnel in the organization in the long term. The school has organized training and study trips both domestically and internationally to enhance knowledge and skills in modern teaching, knowledge, and skills necessary for managing learning in the 21st century, especially in developing teachers to be able to use technology to manage teaching effectively by integrating social media into learning management. At the same time, teachers are encouraged to conduct classroom research to improve teaching. Student evaluation to listen to opinions and suggestions is an important method for developing teachers. However, it was found that teachers and personnel have heavy workloads and repetitive document management, which prevents teachers from fully focusing on teaching development. Therefore, even though teacher development is continuous, having too much workload may cause teaching development to be incomplete.

2.5) In terms of cooperation networks, Mukdahan School places great importance on building cooperation networks with various institutions both domestically and internationally, including universities, government and private institutions, and international organizations. The school has network partners to develop the school and students 'education. The establishment of this network enables the school to efficiently gather resources, opportunities, and capable individuals to exchange academic information and collaborate in developing curricula and activities to help promote learning and develop new skills for students. Creating a collaborative network enables the school to utilize external resources to increase the potential of students and



staff. Parents play an important role in participating in decision-making, problem-solving, and development planning processes. They support participation in planning and implementing educational activities, create friendly communication channels, and organize activities to promote cooperation between parents, students, and teachers.

2.6) In terms of graduates' characteristics, students have higher academic standards than the national average in all subject groups. Each year, at least 3 students are accepted into the Faculty of Medicine, and in the 2024 academic year, it is expected that several more Mathayom 6 students will be accepted into the Faculty of Medicine. In addition, 100 percent of students in the Mini English Program (MEP) who applied to enter Chulabhorn Science School, Mukdahan, were accepted, indicating the success of preparing students for higher education. The educational success of Mukdahan School students reflects the efficiency of the school's management and curriculum development. The fact that students are accepted into the Faculty of Medicine and leading science schools indicates the readiness and characteristics of graduates who can compete at a high level. This is the result of cooperation between the school, parents, and students who continuously develop and promote academic potential.

2. 7) Research and innovation Mukdahan School has promoted teachers to be innovative teachers to create new innovations in learning management, One Teacher One Innovation, and promoted the use of technology to support teaching and learning to be timely and in line with the digital world, which helps increase students' interest and makes learning not limited to the classroom, but can be learned anywhere via online systems. Creating smart classrooms, creating classrooms full of technological equipment, and promoting students to be thinkers to be innovators to create innovations. One Classroom one Project promotes important skills in the 21st century, skills in thinking, analysis, working with others (Collaboration), and the use of technology in creativity, which are skills necessary for self-development and preparation for the rapidly changing future work.

From the study of school administration towards excellence, the case study of Mukdahan School shows that the school has good management in many aspects, especially the use of technology in data management and teaching. However, there are still some problems, such as the distribution of workloads in some groups and the lack of budget for purchasing quality teaching equipment. Developing a curriculum that meets the needs of learning in the 21st century helps



enhance skills needed in the future, but still faces challenges in terms of budget and student selection. The recommendations from the study include reducing unnecessary workload for teachers, improving student selection systems, and expanding cooperation networks to enhance school education efficiency.

Discussion of Results

Summary of all the study results, Mukdahan School has strength in administration in various aspects covering academic, personnel, budget and general work. However, the development of educational institution administration towards excellence in the case of Mukdahan School must take into account 7 main aspects as followings:

1. Management from the case study of Mukdahan School, it was found that the school has good management in many aspects. There is an educational institution management process in which administrators conduct activities or processes related to education with planning, control and management to ensure that students are of quality, knowledgeable, and have desirable characteristics according to the intention of education management, consisting of 4 main tasks: academic administration, personnel administration, budget administration, and general administration (Samma Ratthanit 2560: 137). The use of technology in data management and teaching and learning, and the challenge of developing a curriculum that meets the learning needs of the 21st century, have led Mukdahan School to have good management, especially in the use of technology in information management. The Office of the National Education Commission (2000: 29-30) has developed learner-centered learning indicators by specifying 9 learner learning indicators and 10 teacher learning indicators as a checkpoint that whenever learning or teaching according to the indicators occurs, With good management and quality, as Henri Fayol (1917: online) proposed "14 principles of management", such as division of work, authority and responsibility, chain of command, unity of command, discipline, unity, etc., which are important guidelines for effective management of the organization. Max Weber (2018: online) proposed the concept of "Bureaucracy", which emphasizes the formal organizational structure, hierarchy, rules and clear work procedures to create orderliness and efficiency in work. In conclusion, Mukdahan School has management as an important process in leading educational institutions to success and



has a clear work process and a clear chain of command to create orderliness and efficiency in work.

2. In terms of curriculum development, Mukdahan School focuses on developing a curriculum that meets the needs of students and future trends by using the concepts of Active Learning and Thinking School in teaching and learning at the secondary level 1st and secondary level 4th, which reduces repetitive basic subjects and increases elective subjects that respond to students' interests more (Hurix, 2021: Journal). Developing a curriculum in this way helps students have important skills for future life. The curriculum is continuously developed in terms of adapting the curriculum to suit the learners (BartonManor, 2020: Journal). It is an area where the school focuses on learning in science and mathematics. There are many outstanding science projects that have received awards, namely, Applied Physics. In addition, the highlight of organizing the curriculum (competency curriculum) to be a world class standard school curriculum is diversity and flexibility. Mukdahan School organizes a diverse and flexible curriculum to be consistent with the interests and needs of students. Students can choose to study in a field that they are good at and interested in. Emphasis on 21st Century Skills The school focuses on developing essential 21st century skills such as analytical thinking, problem solving, and communication skills to prepare students to adapt and succeed in a rapidly changing society. Promoting Morality and Ethics In addition to academic development, the school also emphasizes the cultivation of morality and ethics to make students good citizens of society. By organizing a diverse curriculum and emphasizing the development of essential skills, Mukdahan School is an educational institution that is ready to prepare students to step into the future with confidence, which is consistent with (Weerayut Plailek, 2562:384). The teaching model based on the Active Learning concept has been developed to enhance mathematical skills and thinking processes. In addition, (Naphasiri Kitsanan, 2563:232) has developed a learning management model to enhance complex thinking skills for lower secondary school students at the Demonstration School under Srinakharinwirot University. The use of the Active Learning concept in teaching and learning management helps reduce the repetition of basic subjects and increase elective subjects that respond to students' interests more, which is consistent with the Mukdahan School's approach that focuses on developing the curriculum to meet the needs of learners and future trends. Curriculum development in this manner requires training and development of teachers' potential to be able to



use the Active Learning and Thinking School concepts effectively. Therefore, developing a curriculum with a highlight of curriculum management (competency curriculum) to be a world class standard school curriculum, using the Active Learning and Thinking School concepts helps enhance important skills for future students in creating innovators, as well as preparing teachers to organize teaching and learning that responds to the needs of learners and society in the future.

3. In terms of teaching management, Mukdahan School promotes and supports the learning management process, emphasizing thinking competency to teaching management in which learners participate in learning management that integrates learning management activities and measures and evaluates results in a variety of ways with learners 'tangible competencies. It emphasizes the development of personnel in learning management and continuous development of professional standards by using appropriate technology in line with the interests and nature of teachers 'subjects with modern knowledge and skills, including the ability to adapt to changes and use technology in teaching, as (Prasat Nuangchaloem, 2556: 12) mentioned the importance of academic management that modern academic management focuses on students as the center or learners are the most important, adjusting the role of teachers from knowledge transmitters to learning guides, as well as using technological innovations and various sources of knowledge to promote and support student learning. There are important components as follows: Appropriate and modern educational institution curricula, such as Smart Classroom, AP MAP World Class, and having networks both domestically and internationally. The curriculum must be consistent with the needs of the labor market and society around the world, including content that can develop important skills such as analytical thinking, problem solving, teamwork, and communication, as Stephane, Simon, and Feng (2019: 222-252). Said that the development of the school curriculum is a study of information about the conditions and needs of the community, the analysis of the potential of the school, the determination of the purpose of the curriculum, and the determination of the content, activities and various media. And (Kritsada Wichienphet, 2558: 96) The study and analysis of the current conditions, problems and needs of the community, the environment of the school is the preparation of the curriculum structure and various contents specified in the school curriculum to be consistent with the vision, the implementation of the curriculum in teaching and learning, the monitoring and evaluation of the use of the curriculum. In terms of the learning environment, an environment conducive to learning is important in



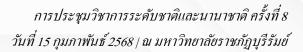
promoting full development, including the provision of modern media and technology. As (Pronphan Tamthada, 2556: 79-100) said, encouraging teachers to organize activities for learners to learn from real experiences, practice doing, thinking, and continuously seeking knowledge, encouraging and supporting teachers to create an atmosphere, environment, learning media and facilitation so that learners can learn and be knowledgeable, encouraging teachers to organize content and activities consistent with the interests and abilities of learners. In terms of measurement and evaluation of learning outcomes, the evaluation of learning outcomes must be effective, with a variety of programs using the information system. Modern and diverse teaching management, fair teaching management, including the use of data to analyze and improve teaching and learning through participation and skill development, encouraging students to participate in teaching and learning and developing diverse skills is important, in line with (Sopana Sawakonchkon, 2562: 84). It was said that the development of the learning process is to encourage teachers to create a learning management plan according to the learning content and learning units, focusing on learners as the main focus, encouraging teachers to organize content and activities in line with the interests and aptitudes of learners, taking into account individual differences, encouraging teachers to organize teaching and learning by combining various knowledge, including instilling morality, good values and desired characteristics, providing teaching supervision for teachers and promoting teacher development to develop the learning process by teachers having continuous training, participating in training programs that focus on new skills and the latest technology so that teachers can use them effectively in the classroom, teachers using technology in teaching, using new technologies such as online learning platforms, digital teaching media and various applications to increase teaching efficiency and working together and exchanging experiences, organizing teaching and learning using the PLC (Professional Learning Community) process, creating a collaborative network between teachers to exchange knowledge and effective teaching techniques. Therefore, Mukdahan School has applied these elements to the educational institution to help prepare students for the challenges of the world in the present and future eras.

4. In terms of personnel development, Mukdahan School places great importance on promoting the development of teachers and educational personnel, including promoting teamwork and effectively developing teachers 'potential. It is necessary to develop teachers 'skills to be



appropriate for the digital age and to encourage teachers to continuously develop themselves, enhance their knowledge and skills in teaching that are up-to-date, have the knowledge and skills necessary for managing learning in the 21st century, increase skills, knowledge, and attitudes by training that emphasizes short-term results to improve work performance, while development emphasizes change, increase potential, and create long-term learning (Werner and Desimone, 2009, p.5), especially in developing teachers to be able to use technology to manage teaching effectively, integrate social media into learning management, and emphasize training that is consistent with the work, create a central digital platform for exchanging knowledge, which all approaches should be carried out in an integrated manner to be consistent with the current organizational environment (Jakkrit Meesri, 2566:19) The objectives of human resource management consist of 4 important aspects: social aspect, which aims to create moral and social responsibility; organizational aspect, which helps promote the organization's operational efficiency; functional aspect, which focuses on managing human resources to meet the needs of the organization in a worthwhile manner; and personal aspect, which supports personnel to achieve personal goals and build morale, affecting the success of the organization as a whole. Government personnel play an important role in supporting national development and providing effective services to the public. Success in this role requires a variety of abilities, especially seeing the big picture of the organization, which means deeply understanding the goals, missions, or tasks of the organization, as well as being aware of one's own roles and duties in the context of those goals (Paitoon Sonsai and Group, 2565: 548).

5. Creating a collaborative network Mukdahan School has a network of partners to participate in promoting and supporting in order to develop the quality of education and promote student learning. Parents play an important role and participate in decision-making and solving various problems in curriculum development, including international collaboration networks from the United States and Taiwan. In addition, the school has created collaborations with external agencies such as universities, government organizations, and the private sector to build the capacity of teachers and students, which is consistent with the concept of creating a collaborative network. (Sergiovanni, T.J.,2005) "Collaboration and Networking" proposed the concept of "Scholas a Learning Community", emphasizing the creation of organizational culture, promoting the exchange of knowledge and professional development among teachers, administrators,



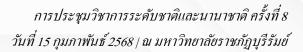


students, parents, and the community to support the creation of a collaborative network between the school and external agencies such as universities, government organizations, and the private sector, to have relationships and cooperate with the school to develop the quality of education and promote student learning, with a common goal of creating an environment conducive to learning and developing students' potential to the fullest. As a partner of the school network, the creation of these networks will help improve the quality of management. In addition, the creation of a collaborative network of Mukdahan School also reflects the participatory management of Mukdahan School, which promotes the participation of all relevant parties, including teachers, parents, students, communities, and external agencies, to improve teaching efficiency and school management. The Faculty of Academic Administration participates in Design and develop the curriculum, including the selection of media and technology appropriate for teaching. The Faculty of Human Resource Management emphasizes teamwork and the development of teachers ' abilities. In addition, the participation of parents and communities helps create understanding and support for education related to the local area, including the creation of networks of cooperation with external agencies such as universities and government organizations. The development of participatory educational quality management will help create shared responsibility, improve personnel's work efficiency, and make educational management sustainable. Based on the concept of participatory management, it appropriately responds to the needs of society. The importance of participatory management in creating a democratic work atmosphere, giving participants the opportunity to express their opinions, participating in decision-making, and taking responsibility will make colleagues aware of the organization's problems. This is not an incentive to work hard to receive a higher salary, but the reward of praise, compliments, and honor are important motivating factors that give employees a variety of energy to work when they are successful. Even though workers do not receive salary or compensation, they still feel proud (Than SuntiYuth, 2551: 540). Networks will support resources, knowledge and experiences to develop teaching and learning, create an atmosphere and opportunities for learning both inside and outside the classroom, and help students develop their knowledge, skills and characteristics in all aspects. Networks help schools become strong and sustainable, such as organizing academic camps, offsite education, providing scholarships, donating learning equipment, providing further education



guidance, providing life problem counseling, and participating in school development planning, etc.

- 6. In terms of graduates' characteristics, the academic success of Mukdahan School students reflects the rigorous student selection process and quality education management. The fact that students have higher academic achievement than the national average in all learning groups indicates the efficiency of the school's management and curriculum development. Schools that plan and manage education that focuses on academic excellence play an important role in creating a learning environment that encourages students to fully demonstrate their potential. His research also supports that selecting students with appropriate qualifications and promoting learning with quality resources increase academic achievement (Somwang PitiKan, 2563: 45). Student success results from the integration of educational resources, curriculum development that meets student needs, and achievement-based management, similar to students in the Mini English Program (MEP) special program at Mukdahan School who were successful in the medical school entrance exam and Chulabhorn Science School, reflecting the academic potential and appropriate support for students (Napaporn VichaiWong, 2561: 32). Management that emphasizes leadership development and the creation of a learning culture in schools can significantly increase student achievement (Fullan and Quinn, 2016: 75). The key factors affecting educational success are teacher skill development and the use of data in learning planning, which is consistent with the context of Mukdahan School, which provides appropriate support for teachers and students. Students 'admission to leading medical schools and science schools (Hattie, 2009: 112) indicates the readiness and characteristics of graduates who can compete at a high level. This is the result of cooperation between the school, parents, and students who continuously develop and promote learning potential.
- 7. Research and innovation Mukdahan School has promoted teachers to be innovative teachers to create new innovations in learning management One Teacher One Innovation, which educational research and innovation in learning management and understanding the complexities involved in teaching and learning in all aspects are important (Gail Richmond1 and Maria Teresa Tatto, 2016:journal) including promoting the use of technology to support teaching and learning to be up-to-date and in line with the digital world, which is consistent with the innovation management model for excellence of private schools under the Office of the Private Education





Commission. There is the first component, which is learner development focusing on results. The group of experts agrees on developing the results for learners to the highest extent with new strategies, methods and innovations to emphasize and emphasize the original behavior more clearly or create new learner behaviors that should be consistent with the current context and the expected future of learners that have changed from the past (SantiChai JaiChumChuen, 2561:215) to help increase interest for students and make learning not limited to the classroom but can be learned anywhere through the online system. Creating a smart classroom Creating a classroom full of with technological equipment and encourage students to be thinkers to be innovators to create innovations One Classroom one Project which is consistent with the management model for developing innovative characteristics of students in schools that expand educational opportunities. Under the globalization era that will cause changes and expansion of learner development that is occurring rapidly at present by promoting the innovative characteristics of students in schools that expand educational opportunities to have innovative thinking skills as important, to be people who have initiative and are able to create new things, to move towards a successful future, to create people who are good thinkers, can think, can do, can create new things by themselves, to seek new ways to have work, to be co-creators of innovation, to be quality and efficient innovators, to create results according to the goals as a management guideline for developing innovative characteristics of students (Kanita Mousrijan, 2564: 6). Promoting important skills in the 21st century, analytical thinking skills, working with others (Collaboration), and the use of technology and innovation in the education system are very important for improving the efficiency and productivity of schools in the 21st century. The introduction of innovation into the education system will help ensure that the existing education system will Produce students with skills and knowledge to meet current and future needs (Dayang Rafidah Syariff M. Fuad, Khalip Musa, Hamidah Yusof. 2020: journal) From this research study, it shows the integrated management and improvement in various aspects that will result in Mukdahan School being excellent in educational administration, including the creation of a solid foundation in developing learners to be ready to cope with changes in the digital age world, including the creation of innovations in educational administration with quality and educational standards. It is an excellent educational administration that is committed to developing the quality of education through quality and effective management. It develops quality students in terms of academics, morality, and life skills to prepare for the future. The school's operations are



comprehensively developed with systematic and modern management that is easily accessible. The development of teaching quality is in line with technological changes, the development of teaching personnel to be able to transfer knowledge and inspire students, as well as resource management and cooperation with the community, and the creation of networks to support student learning management to meet international school standards.

Research on educational administration towards excellence: A case study of Mukdahan School shows the importance of integrating various theoretical concepts in educational administration to make administration more efficient, both in terms of academics, personnel management, budget management, and the creation of cooperation networks. This helps to enhance the excellence of educational administration, making the development of educational institutions consistent with the needs of society and the era.

Research Suggestions

Suggestions for the research on Educational Administration towards Excellence: A Case Study of Mukdahan School are as followings:

General Recommendations

1. Secondary schools should establish networks both domestically and internationally to coordinate cooperation in developing quality, raising educational standards to international standards, and providing flexible administration with access to important resources in many areas, including human resources with expertise, modern technological resources, and creating collaborations in research and innovation. The One Classroom One Project helps students develop innovations that meet market demands. Establishing international networks is a collaboration that creates opportunities to learn about cultures based on good practices and promotes opportunities to raise educational standards to international standards, which is a continuation of further education in foreign institutions. Networking to develop life and work with the business sector will help students gain internship or vocational training opportunities, and promote specific excellence, such as organizations that support science, arts, or sports. Networking is important for developing the quality of education and creating opportunities for students, and having a strong network is important for educational administration towards excellence.



2. Educational institutions should use technology to manage Big Data to facilitate management, convenience, speed, and modernity. School administrators can analyze data and make decisions, record student learning, track and evaluate student learning outcomes directly, efficiently manage resources, analyze individual needs of students, design learning programs that are appropriate for students in the curriculum, and school directors can use data for research and curriculum development, access learning outcomes, and participation in student activities to view in-depth information or big data from online education systems, such as learning through MOOCs (Massive Open Online Courses) to analyze student learning, as well as control and management of student admissions systems that require Big Data to help check educational status and check educational quality according to student needs and the digital society directly.

Policy recommendations

- 1. The parent organization should promote and implement the school management guidelines to raise secondary schools to achieve sustainable excellence.
- 2. Schools should be promoted and supported in developing the quality of students, the quality of teachers and personnel, and the quality of school management in order to achieve goals according to educational standards sustainably and efficiently.
- 3. Should promote the development of educational quality to reach excellence, along with raising the level of educational administration to achieve the goals efficiently and effectively, leading to stable development and sustainable international standard educational administration in the future.

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Guidelines for Internal Quality Assurance for the Continuous Educational Quality Development in Schools under Ubon Ratchathani Primary Educational Service Area Office 4 in Thailand

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Abstract

This research aims 1) to study the operational conditions of internal quality assurance in schools to continuously develop the quality of education under Ubon Ratchathani Primary Educational Service Area Office 4, 2) to compare the operational conditions of internal quality assurance in schools to enhance education quality, classified by position, educational level and work experience and 3) to identify guidelines for the operation of internal quality assurance in schools to continuously improve the quality of education under Ubon Ratchathani Primary Educational Service Area Office 4. The sample for this study consisted of 197 school administrators and teachers from Samrong District under Ubon Ratchathani Primary Educational Service Area Office 4. The sample was selected using stratified random sampling. The sample size was determined by using the Krejcie and Morgan formula. The research instrument was a 5-point Likert scale questionnaire with a reliability coefficient of 0.97. The statistics used to analyze the data were percentage, mean, standard deviation, t-test and F-test.

The research found that:

1. The operational conditions of internal quality assurance in schools for continuous development of educational quality in Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4, found that the overall level was at a high level.



- 2. The comparison of the operational conditions of internal quality assurance in schools for continuous development of educational quality in Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4, classified by position, education level and work experience, was found that overall, there was a statistically significant difference at the .05 level.
- 3. The guidelines for the operation of internal quality assurance in educational schools for continuous development of educational quality in Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4, there are 7 aspects followed by 1) Determining educational standards of educational institutions should set clear goals and standards of education. 2) Creating an educational development plan for schools should be planned in line with the needs and potential for schools. 3) Operating of the educational development plan for schools should be implemented in practice, focusing on creating an atmosphere and activities that support quality learning. 4) Evaluating and inspecting of educational quality within schools should systematically evaluate educational quality to achieve the goals and standards set. 5) Monitoring the performance for school development. The performance should be monitored and evaluated continuously. 6) Preparing a self-evaluation report. The report should reflect the self-evaluation results of the schools to be used as a tool for further development and improvement of education. 7) Continuous developing of educational quality, the quality of education should be developed and improved all the time, with an emphasis on sustainable development through regular review and development of the plan.

Keyword: internal quality assurance, Primary Educational Service Area Office

Introduction

Education is a process that gives people knowledge and skills that lead to the development of individuals to be able to live in society with quality. This process must look back to the starting point that creates quality results or can be called the origin of the process, which is education management. Education management is the starting point of the process, starting from the determination of the curriculum, learning structure, teaching management, achievement measurement, etc. When these processes occur, there is also a process that will make education improve, correct, or develop periodically and continuously in a systematic way, which is



education quality assurance. There is something that makes those involved confident in the education quality that there are processes and steps in accordance with the rules and regulations systematically by using technology to create the information system of the schools.

The Ministerial Regulation (2010: 23) on the system, criteria and methods for educational quality assurance mentions the educational quality assurance system within the schools as a part of the educational administration. The principle of community participation and related agencies by promoting, supporting and supervising the parent organization. Which is a process of continuous educational quality development consisting of 1) Internal quality assessment is an assessment of the quality of education management of the educational institution. Performed by personnel of the educational institution or by the educational service area office or by the parent organization. That is responsible for supervising the schools. This is to use the results of the assessment planning the development of activities and projects that respond to the real situation. There is a possibility to improve the quality and standards of education. 2) Educational quality monitoring is a process of monitoring and inspecting the progress of the implementation of the educational quality development plan of the schools and preparing a report on monitoring and inspecting the educational quality along with suggesting measures to accelerate the development of educational quality. 3) Educational quality development is a process of developing education into quality that is consistent with national educational standards by setting educational standards, organizing the planning system and structure and implementing the plan, including creating awareness that educational quality development must be carried out continuously and is the everyone's responsibility in terms of the steps and details of internal quality assessment. The National Education Act B.E. 2542, which was amended by the Education Act (No. 2) B.E. 2545, Section 4 7 of the National Education Act stipulates that there must be an internal education quality assurance system and external education quality assurance for the development of educational quality at all levels. It must be in accordance with the ministerial regulations. Therefore, the ministerial regulations that have already been issued have been revoked and the new ministerial regulations, namely the Ministerial Regulation on the System, Criteria and Methods of Educational Quality Assurance B.E. 2553, are to be used instead, integrating internal quality assurance of education at the basic education, vocational education, higher education levels and external quality assurance in the same edition. This Ministerial Regulation creates a clearer



understanding of the system, principles and methods of internal and external education quality assurance based on the principle of community participation, relevant agencies, both public and private sectors. There are 8 criteria and practices for implementing internal quality assurance at the basic education level as follows: 1) Determine educational standards of the schools. 2) Prepare an educational management development plan of the schools that focuses on quality according to the educational standards of the schools. 3) Organize management and information systems. 4) Operate according to the educational management development plan of the schools. 5) Arrange for monitoring and inspection of educational quality. 6) Arrange for internal quality assessment according to the educational standards of the schools. 7) Prepare an annual internal quality assessment report. 8) Arrange for continuous development of educational quality (Office of Academic Affairs and Educational Standards, 2006: 6).

Ubon Ratchathani Primary Educational Service Area Office 4 plays an important role in overseeing and developing the quality of education in the area of responsibility. It focuses on quality assurance at every step from policy determination, curriculum development, school management. To the development of teachers and educational personnel to participate in planning, monitoring and evaluating the school's performance to ensure that all students receive equal and educational quality opportunities. In addition, schools are encouraged to participate in the development of internal quality assurance systems to ensure continuous and sustainable development (Ubon Ratchathani Primary Educational Service Area Office 4, 2024: Online).

The research team is interested in studying internal quality assurance in schools for continuous development of educational quality under the Ubon Ratchathani Primary Educational Service Area Office 4 to be used as a guideline for organizing technology and information systems for internal quality assurance in schools to ensure continuous quality.

Objective

- 1. To study the operational conditions of internal quality assurance in schools to continuously develop the quality of education under Ubon Ratchathani Primary Educational Service Area Office 4.
- 2. To compare the operational conditions of internal quality assurance in schools to enhance education quality, classified by position, educational level and work experience.



3. To identify guidelines for the operation of internal quality assurance in schools to continuously improve the quality of education under Ubon Ratchathani Primary Educational Service Area Office 4.

Research Methodology

Population and sample

- 1. Population: School administrators and teachers in Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4, totaling 378 people.
- 2. Sample: 24 school administrators and 173 teachers totaling 197 people were selected by simple random sampling. The sample size was determined using Krejcie and Morgan's table. And 3 school administrators were interviewed by purposive selection.

Instruments used in the research

1. Questionnaire

Section 1: Basic information on the status and general information of the respondents. It is a checklist consisting of position, education level and work experience.

Section 2: Questionnaire covering content on internal quality assurance in schools for continuous development of educational quality in Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4, covering 7 areas 1) Determining educational standards of schools 2) Creating educational development plans for schools 3) Implementation according to educational development plans of schools 4) Evaluation and inspection of educational quality within schools 5) Monitoring operations to develop schools 6) Preparing self-evaluation reports and 7) Continuous development of educational quality. It is 5 Point Likert Scale with scores as follows: Strongly agree, Agree, Neutral, Disagree, Strongly disagree.

Section 3: Open-ended questionnaire about the guidelines for internal quality assurance operations in schools to continuously develop the educational quality in Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4

2. Interview form about the guidelines for internal quality assurance operations in schools to continuously develop the educational quality, divided into 2 parts, 7 aspects.



Instrument development

In this research, the research team created and developed the instrument by following the following steps:

- 1. The researcher studied concepts, theories, documents, textbooks and research related to internal quality assurance in schools to be the concept for creating the questionnaire, then sent the created questionnaire to experts for consideration and content validity check and calculated the index of consistency (IOC). The criteria for selecting questions were set at 0.60 or higher and then revised according to the experts' suggestions. The IOC value was between 0.80 1.00.
- 2. The questionnaire that had been reviewed by experts was tested (Try-out) with 50 school administrators and teachers in schools in Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4 who were not the sample group. Then, the questionnaire was tested for reliability using the method of finding the Alpha coefficient of (Cronbach Alpha Coefficient) which resulted in a reliability of 0.97 for the entire version. The questionnaire was revised to collect real data with the sample group.

Data Analysis

- 1. Quantitative data, the research team analyzed the data according to the steps by checking the completeness of the questionnaire responses, scoring according to the scoring criteria and using the obtained scores to calculate the frequency, percentage, mean (\bar{x}) and standard deviation (S) using a ready-made computer program. The data were analyzed using the t-test and F-test.
- 2. The research team used the data obtained from the open-ended questionnaire on the guidelines for internal quality assurance operations in schools to continuously develop the educational quality in Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4, using the content analysis method.

Statistics used in data analysis

- 1. Descriptive statistics include frequency, percentage, mean (\bar{x}) and standard deviation (S) to describe general data.
 - 2. Inferential statistics include t-test and F-test.



Results

- 1. From the analysis of data showing the mean and standard deviation of the condition. Ranked in descending order as follows: 1) Determining educational standards of the schools (\bar{x} = 3.97). 2) Creating a plan for educational management of the schools (\bar{x} = 3.96). 3) Creating a self-evaluation report (\bar{x} = 3.93). 4) Continuous development of educational quality (\bar{x} = 3.93). 5) Implementation of the educational management development plan of the schools (\bar{x} = 3.92). 6) Evaluation and inspection of educational quality within the schools (\bar{x} = 3.91). and 7) Monitoring the results of operations to develop the educational institution (\bar{x} = 3.89).
- 2. Comparison of the conditions of the implementation of internal quality assurance in schools for continuous development of educational quality in Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4, classified by position, education level and work experience, found that the overall picture was significantly different at the .05 level.
- 3. Guidelines for the implementation of internal quality assurance in schools continuously develop the quality of education, Samrong District, under the Office of the Primary Educational Service Area of Ubon Ratchathani Area 4, has 7 aspects 1) Determining the educational standards of the schools. There should be clear goals and standards for education so that the schools have a clear guideline for developing and improving the educational quality. 2) Creating a plan for developing the educational management of the schools. The plan should be in line with the needs and potential of the schools in order to develop the teaching and learning process and management. 3) Implementation of the educational management development plan of the schools should be put into practice, focusing on creating an atmosphere and activities that promote quality learning. 4) Evaluation and inspection of the educational quality within the schools should assess the quality of education systematically to ensure that the development plan achieves the goals and standards set. 5) Monitoring the results of the operations for educational development should continuously monitor and evaluate the results so that the operations can be improved and developed to meet the needs of students and society. 6) Creating a self-evaluation report should create a report reflecting the results of the self-evaluation of the schools to be used as a tool for further development and improvement of education. 7) Continuous development of the educational quality should be developed and improved all the time, emphasizing sustainable development through regular review and development of the plan.



Discussion and Conclusion

From the research results on internal quality assurance in schools for continuous development of educational quality, Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4, the results can be discussed as follows:

1. The operating conditions of internal quality assurance in schools for continuous development of educational quality, Samrong District, Ubon Ratchathani Primary Educational Service Area Office 4. Overall and in each aspect are at a high level. This may be because the schools give importance to internal quality assurance in schools as announced in the Ministry of Education Regulations 2018 and Ubon Ratchathani Primary Educational Service Area Office 4 also has a policy on promoting the development of educational quality assurance systems using digital technology as well as the development of teachers and educational personnel, which is consistent with the research results of Kornan Sophas (2022: 81) studying the conditions and needs for development of internal quality assurance in schools under the Office of Samut Prakan Primary Educational Service Area 1. The results of the study found that overall, it is at a high level and in every aspect. Wittawat Hahom (2024: 206) studied the guidelines for developing the operation of the internal quality assurance system in schools under the Special Education Center, Efficiency Promotion Network Group 7. The results of the study found that the operating conditions of the internal quality assurance system in schools. Overall is at a high level. Kawiwat Ruechailam (2024: 398) studied the conditions and guidelines for internal quality assurance management in schools according to the Ministry of Education Quality Assurance Regulations B.E. 2561 of schools under the Office of the Secondary Education Service Area, Samut Prakan. The results of the study found that the overall quality assurance management in schools is at a high level.

2. Comparison of differences in the conditions of internal quality assurance operations in schools for continuous development of educational quality in Samrong District, Ubon Ratchathani Primary Education Service Area Office 4, classified by position, education level and work experience found that overall, there were statistically significant differences at the .05 level, in accordance with the hypothesis. This may be due to the knowledge and skills of personnel with higher positions, higher education levels or more experience tend to have more knowledge and skills related to quality assurance, enabling them to operate more efficiently. Different roles and



responsibilities of each position affect participation and decision-making power in operations, including access to different resources such as training, budget support and physical resources, which affect operational efficiency. Personal factors, interests, attitudes and motivations of each personnel also affect operations. Which is consistent with the research results of Charukit Sutsuk (2022: 108) studied the conditions of internal quality assurance operations in digital-era schools under the Office of the Secondary Education Area, Ubon Ratchathani, Amnat Charoen. The results of the study found that the comparison of the conditions of internal quality assurance operations in digital-era classified by work experience, overall was significantly different at the .05 level. Chalerm Sarakarn (2023: 1703) studied the conditions of internal quality assurance operations in basic schools under the Office of the Secondary Education Area, Ubon Ratchathani, Amnat Charoen. The results of the study found that the comparison of the conditions of internal quality assurance operations according to the opinions of school administrators and heads of educational quality assurance, classified by education level, work experience and size of the schools, overall was significantly different at the .01 level.

3. Guidelines for the implementation of internal quality assurance in schools to continuously develop the educational quality, Samrong District, under the Office of the Primary Educational Service Area of Ubon Ratchathani Area 4. There should be clear goals and standards for education so that the schools have a clear guideline for developing and improving the educational quality. The plan should be in line with the needs and potential of the schools in order to develop the teaching and learning process and management. Development plan of the schools should be put into practice, focusing on creating an atmosphere and activities that promote quality learning. The schools should assess the quality of education systematically to ensure that the development plan achieves the goals and standards set. Monitoring the results should continuously monitor and evaluate the results so that the operations can be improved and developed to meet the needs of students and society. A self-evaluation report should create a report reflecting the results of the self-evaluation of the schools to be used as a tool for further development and improvement of education. The development should be developed and improved the quality all the time, emphasizing sustainable development through regular review and development of the plan. Consistent with the research of Petchrat Kongwai (2021: 70) on the development of guidelines for the operation of the internal education quality assurance system in small schools under the Office



of the Kanchanaburi Primary Educational Service Area 3 which concluded that schools must set educational standards, create a development plan, implement the plan with participation, evaluate internal quality with transparency, prepare SAR reports that reflect actual data, continuously develop personnel and quality assurance systems and follow up on results for adjustment. Prepare schools to have quality and efficiency according to standards. And Wasana Khamhuaihan (2016: 70) who studied on the guidelines for internal quality assurance in secondary schools under the Office of the Secondary Education Area 36, schools should study the standards and various related indicators, create a management structure that is conducive to operations, appoint an operation committee and clearly define roles and responsibilities in each area, decentralize administrative power, everyone participates and publicizes with all relevant parties. Creating an educational management development plan that is consistent with the context of the schools, plan operations according to the educational management development plan of the schools, operate according to the steps and time frame specified in the action plan, provide supervision and monitoring of operations, follow up and evaluate operations by providing an annual report that is an internal quality assessment report to develop the schools under the PDCA process.

Suggestion

- 1. Suggestions for applying the research results
- 1. Develop guidelines for internal quality assurance operations in schools to continuously develop the quality of education, emphasizing the participation of teachers and personnel in every step, organizing training and monitoring the educational quality continuously.
- 2. Support the implementation of internal quality assurance operations in schools to continuously develop the educational quality according to the context of the schools using the research results to develop policies and allocate resources appropriate to the size and context of the educational institution such as supporting technology in small educational institutions or using an evaluation system that can track student development in real time in large schools.
- 3. Create Professional Learning Community (PLC) and link schools to share experiences in internal quality assurance operations to continuously develop the educational quality along with using technology to disseminate information and reflect the results of sustainable development.



2. Suggestions for further research

- 1. Study the conditions of internal quality assurance operations in schools in various contexts such as secondary education areas, urban or rural areas, to develop guidelines for internal quality assurance operations in schools to continuously develop the educational quality appropriately.
- The impact of internal quality assurance operations on the development of student learning quality should be studied to link the development of the educational quality in each school with sustainable development goals.

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Guidelines for Curriculum Management in Accordance with 21st Century Learning in Sawang Wirawong District, under the Office of Ubon Ratchathani Primary Educational Service Area 4 in Thailand

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Abstract

This research article aims to 1) examine the management of school curricula aligned with 21st-century learning in Sawang Wirawong District, under Office of Ubon Ratchathani Primary Educational Service Area 4, 2) compare the management of school curricula aligned with 21st-century learning within the same district, categorized by position, educational level, and work experience and 3) propose guidelines for managing school curricula aligned with 21st-century learning in Sawang Wirawong District under the Office of Ubon Ratchathani Primary Educational Service Area 4. The sample group consisted of 19 school administrators and 133 teachers, totaling 152 participants, along with 7 experts in school curriculum management aligned with 21st-century learning. The research tools included a 5-point Likert scale questionnaire with a reliability coefficient of 0.987 and a semi-structured interview. Data were analyzed using percentages, means, standard deviations, t-tests, analysis of variance (ANOVA), and content analysis.

Research Findings are

- 1. School curriculum management in Sawang Wirawong District, under the Office of Ubon Ratchathani Primary Educational Service Area 4, is at a high level overall.
- 2. No significant differences were found in curriculum management when compared by position, educational level, or work experience.



3. Seven key guidelines for managing curricula aligned with 21st-century learning include curriculum research and innovation, integration and flexibility, network participation, 21st-century skills development, teacher development, new world management and continuous evaluation

Keyword: School curriculum management, 21st-century learning

Introduction

The 21st century world is facing rapid and complex changes in every dimension, including the economy, society, technology, and the environment (OECD, 2018: 12). The National Education Plan (2017–2036) sets forth a vision: "To develop Thai people of all ages to become well-rounded individuals who are virtuous, intelligent, happy, and good citizens of the nation, with key competencies in line with national education standards, the Philosophy of Sufficiency Economy, and 21st-century learning skills" (Ministry of Education, 2017: 10). Additionally, the Basic Education Core Curriculum of 2008 (revised in 2017) emphasizes that educational institutions should aim to develop students with the eight desirable characteristics and five key competencies aligned with 21st-century skills (Ministry of Education, 2017: 4). These 21st-century skills consist of three main groups: learning and innovation skills, information, media, and technology skills, and life and career skills (Partnership for 21st Century Skills, 2019: 7). These skills are critical for preparing youth to adapt, understand, learn, and work effectively with others. They also enable individuals to think critically, solve problems, communicate, and innovate proficiently in a diverse, ever-changing, and increasingly interconnected society (Voogt & Roblin, 2012: 305).

The education system plays a vital role in developing learners to fully achieve their 2 1 st-century skills, particularly through school curriculum management, which serves as a crucial mechanism for designing learning experiences that meet the needs of learners, society, and the 21 st-century world (Darling-Hammond, 2010: 45). An analysis of effective curriculum management reveals four key components:1) Preparation and development of the curriculum, 2) Implementation of the curriculum, 3) Supervision and monitoring of curriculum usage and 4) Curriculum improvement.

The school curriculum in Thailand continues to face several problems and challenges, such as the lack of alignment between curriculum content and the development of 2 1 st-century



skills, a shortage of qualified teachers capable of designing and managing learner-centered instruction, insufficient resources and necessary support for effective learning management, and limited stakeholder participation in curriculum development and management (National Institute of Educational Testing Service, Public Organization, 2021: 56).

The Ubon Ratchathani Primary Educational Service Area Office 4 plays a crucial role in promoting, supporting, and improving the quality of education in its affiliated schools to ensure high standards and alignment with 21 st-century learning. Managing school curricula in a way that corresponds to 21 st-century learning is therefore an essential and ongoing task (Ubon Ratchathani Primary Educational Service Area Office 4, 2020: 15). However, the affiliated schools under Ubon Ratchathani Primary Educational Service Area Office 4 differ in various aspects such as school size, location, resources, and community contexts (Office of the Basic Education Commission, 2019: 120). These factors may influence the approach and effectiveness of curriculum management to align with 21st-century learning.

Therefore, the research team recognizes the critical importance of studying guidelines for managing school curricula aligned with 21st-century learning in schools within Sawang Wirawong District, under the jurisdiction of Ubon Ratchathani Primary Educational Service Area Office 4. The aim is to obtain evidence-based data that can contribute to enhancing educational quality, developing learners and preparing students to face the challenges of the 21st-century world.

Research objectives

- 1. To study the current state of school curriculum management aligned with 21st-century learning in schools within Sawang Wirawong District, under the jurisdiction of Ubon Ratchathani Primary Educational Service Area Office 4.
- 2. To compare school curriculum management aligned with 2 1 st-century learning in schools within Sawang Wirawong District, under the jurisdiction of Ubon Ratchathani Primary Educational Service Area Office 4, categorized by position, educational level and work experience.
- 3. To identify guidelines for managing school curricula aligned with 21st-century learning in schools within Sawang Wirawong District, under the jurisdiction of Ubon Ratchathani Primary Educational Service Area Office 4.



Methodology

The researcher defined the scope of the study by focusing on guidelines for managing school curricula aligned with 21 st-century learning in schools within Sawang Wirawong District, under the jurisdiction of Ubon Ratchathani Primary Educational Service Area Office 4. Relevant concepts and theories were reviewed and used to establish the research framework, which includes the research methodology encompassing the sample group, research instruments, data collection process and statistical tools for data analysis, as follows

Research Procedures

1. Define the population and sample group as follows.

The population consists of school administrators and teachers in schools within Sawang Wirawong District, totaling 231 individuals, including 21 administrators and 210 teachers.

The sample group includes 19 school administrators and 136 teachers, totaling 155 individuals, selected through stratified random sampling based on Krejcie and Morgan's table.

2. Development of research instruments by creating a questionnaire divided into three sections.

- 1. General information about the respondents.
- 2 . School curriculum management in four aspects (preparation, implementation, supervision, and improvement) using a 5-point Likert scale.
 - 3. Open-ended suggestions regarding curriculum management.

3. Data collection was conducted as follows

- 1. Obtain permission from relevant authorities to collect data.
- 2. A total of 152 questionnaires were returned (98.07%).

4. Statistics used for data analysis

General information was analyzed using frequency and percentage. Curriculum management was analyzed using mean and standard deviation, along with a 5-level evaluation scale based on Likert's concept, with the levels being highest, high, moderate, low, and lowest. Data from open-ended questions were analyzed using content analysis. Quantitative statistics used included t-tests and analysis of variance (ANOVA).



Result

1. The analysis of the data shows the mean and standard deviation for school curriculum management aligned with 2 1 st-century learning in schools within Sawang Wirawong District under the jurisdiction of Ubon Ratchathani Primary Educational Service Area Office 4. The overall result was at a high level (= 4.46). The ranking from highest to lowest is as follows 1) Preparation and development of the curriculum (= 4.57) 2) Implementation of the curriculum (= 4.49) 3) Supervision and monitoring of the curriculum (= 4.45) and 4) Curriculum improvement (= 4.33). 2. The comparison of school curriculum management aligned with 21 st-century learning showed that, when considering position, educational level and work experience there were no significant differences both overall and by category.

3.The guidelines for managing school curricula aligned with 21st-century learning, based on the opinions of experts in the Ubon Ratchathani Primary Educational Service Area Office 4, revealed that the development of 21st-century curricula includes seven key components 1) Curriculum Research and Innovation – Developing the curriculum through research, pilot testing and appropriate adjustments. 2) Integration and Flexibility – Integrating content across subject areas and using diverse learning processes. 3) Stakeholder Participation – Promoting collaboration among stakeholders and continuous supervision and monitoring. 4) Development of 21st-Century Skills – Focusing on critical thinking, problem-solving, communication and creativity and while creating a modern learning environment. 5) Teacher Development – Ensuring teachers facilitate learning and continuously develop technological skills. 6) Management Responsive to the New World – Using SWOT analysis and local context data to modernize the curriculum. 7) Curriculum Evaluation and Improvement – Conducting annual evaluations and making adjustments based on global contextual changes.

Discussion and Conclusion

1. The management of school curricula in Sawang Wirawong District, aligned with 21st-century learning was generally at a high level in all aspects. This may be due to the effective curriculum management in the district, which emphasizes preparation, curriculum implementation, supervision and curriculum improvement in a comprehensive manner. The curriculum has been developed based on data and research that responds to the demands of the 21st century, with



a focus on Active Learning, the development of essential skills and the modernization of content. This reflects the commitment to preparing students to face future challenges. This aligns with the research of Kasama Chanawong (2021: 38-39) which found that modernizing the curriculum to respond to economic and technological changes remains an area for development. This helps collect data from teachers, students and parents for effective curriculum improvement. The curriculum management in Sawang Wirawong schools meets the demands of 21st-century learning which is consistent with the work of Thitinant Dawasri et al. (2017: 67-73) who found that updating the curriculum to meet the needs of the modern world focuses on developing the essential skills students need in real life. This includes changing teaching methods to improve skills in technology, information, communication and social life skills.

2. The comparison of the mean differences regarding the management of school curricula aligned with 21st-century learning in schools in Sawang Wirawong District, Ubon Ratchathani Primary Education Service Area 4 is as follows by education level and by work experience, it was found that the management of school curricula aligned with 21st-century learning in Sawang Wirawong schools, under the Ubon Ratchathani Primary Education Service Area 4, showed no significant differences in both the overall and individual aspects. The analysis results revealed that the findings did not align with the hypothesis, as there were no statistically significant differences overall or in individual aspects when considering position, education level or work experience. All groups demonstrated high levels of performance, particularly in the areas of preparation and curriculum development, which emphasized experiential learning and contexts suitable for an era dominated by technology and innovation. This reflects the importance of schools adapting to align with changes in the 21st century. This finding aligns with the research by Phikun Namhung (2022: 42) which indicated that educational institutions must be proactive and adjust their education management to prepare students with the skills needed for life in the 21 st century. However, the researcher also found that the average for curriculum improvement was the lowest among the three variables. This reflects the state of curriculum improvement in schools within Sawang Wirawong District where efforts in this area lag behind other aspects. This presents a challenge for administrators to continuously improve and develop curricula to respond to new economic and technological changes. The findings suggest the need for ongoing curriculum improvements to effectively address these changes, consistent with the research by Wilasinee Kanokkraisan (2015:



- 6 7 -7 2). This study emphasized that schools should annually revise and develop their quality education plans by using data and operational issues to inform curriculum management improvements. Schools should also develop planning systems, monitoring, evaluation and reporting systems to ensure they are swift, accurate and up-to-date. In summary, curriculum management in schools within Sawang Wirawong District is generally effective in terms of preparation and curriculum development that aligns with 2 1 st-century learning. However, there remains a pressing need to further develop curriculum improvement processes to ensure they are modern and adequately address economic, technological and local changes.
- 3. Guidelines for the 21st-century curriculum development framework consists of seven key components are 3.1) Curriculum Research and Innovation, 3.2) Integration and Flexibility 3.3) Network Participation 3.4) Development of 21st-Century Skills 3.5) Teacher Development 3.6) Management Responsive to the New World and 3.7) Continuous Curriculum Evaluation and Improvement. These guidelines align with the research of Chuleeporn Surachot (2020: 169-182) on *Developing 21st-Century Learning Management Curricula Using Professional Learning Communities (PLC)*. This study emphasized the development of curricula that meet the needs of today's learners with PLCs serving as a crucial tool for development. Additionally, the research by Arita Pinsuwan and colleagues (2022: 17-18) on *The Skills of School Administrators in the 21st-Century* under the Ubon Ratchathani Primary Educational Service Area Office 4 highlighted the importance of administrators' skills in supporting and developing curricula that align with 21st-century learning. Particularly emphasized was the need to promote connections between innovation, teacher development and management approaches suitable for the context of the modern era.

Suggestions

Guidelines for Utilizing Research Findings

1. Curriculum Development for 2 1 st-Century Learning Schools in Sawang Wirawong District and the Ubon Ratchathani Primary Educational Service Area Office 4 can utilize these research findings to develop curricula that effectively respond to economic and technological changes. This includes modernizing the curriculum to align with critical 21 st-century skills such as analytical thinking, communication and creativity. By applying constructivist learning theories



and knowledge management practices, schools can enhance the relevance and effectiveness of curriculum content.

- 2. Fostering Collaboration and Network Participation Schools can adopt approaches that involve all stakeholders such as teachers, students and parents to collect data and feedback for continuous curriculum development. Promoting collaborative efforts can enhance the curriculum, making it more diverse and responsive to the evolving needs of society.
- 3. Continuous Teacher Development to enable teachers to effectively implement modern curricula that align with 2 1 st-century learning, emphasis should be placed on developing technology skills and modern teaching techniques. This can be achieved through training and promoting lifelong learning opportunities.

Suggestions for Future Research

- 1. Study on the Use of Technology in Curriculum Improvement. There should be research on the use of technology to improve educational curricula, making them more modern and able to respond effectively to changes in the economy and technology.
- 2. Development of Evaluation Methods for 21st Century Curriculum. There should be research on developing and using evaluation tools for curricula that can effectively assess the success of curriculum development in response to 21st-century learning.

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The guidlines for Academic Collaboration Network Administration to Enhance

Educational Quality in the Digital Era for Schools under the Ubon Ratchathani

Primary Educational Service Area Office 2 in Thailand

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Abstract

This research aimed 1) to study the current status and challenges of academic network management for improving educational quality in the digital era among schools under the Ubon Ratchathani Primary Educational Service Area Office 2 2) to compare the academic network management for improving educational quality in the digital era among schools under the Ubon Ratchathani Primary Educational Service Area Office 2 categorized by position, work experience, school size; and 3) to explore strategies for managing academic networks to enhance educational quality in the digital era among schools under the Ubon Ratchathani Primary Educational Service Area Office 2. The samples for this research consisted of 285 people which selected by using stratified random sampling. Research instruments included a 5-point Likert scale questionnaire with a reliability coefficient of .84 and a structured in-depth interview. Data were analyzed using descriptive statistics such as percentages, means, and standard deviations, as well as t-tests, F-tests, and content analysis.

The research findings revealed that the current state of academic collaboration network management for enhancing educational quality in the digital era is, overall, at the highest level. A comparison of academic collaboration network management for enhancing educational quality in the digital era, categorized by position and school size, showed statistically significant differences at the .05 level, while no significant differences were found when categorized by work



experience. The guidelines for academic collaboration network management for enhancing educational quality in the digital era include defining objectives and goals of the network, where collaboration should focus on defining goals for the development of educational quality in the digital era with mutual understanding; operational processes of the network, where technology should be used to support operational tasks, analyze problems, obstacles, and solutions for efficient work; participation of network members, where efforts should be made to encourage knowledge exchange through technology, especially regarding learning assessment and research; promotion of key network activities, where a high-quality communication technology system should be in place to promote the efficiency of collaborative work; development of network members, where techniques and strategies should be implemented to encourage teachers and personnel from member schools to comprehensively and clearly participate in improving educational quality in the digital era; and monitoring and evaluation of network operations, where there should be monitoring, feedback, and improvements to network operations in accordance with the procedures of academic collaboration networks in the digital era.

Keyword: academic network collaboration, digital era, educational quality

Introduction

Background and Significance of the Problem

In the digital era, where technology has a profound influence on all dimensions of life, the education sector is no exception. It has been significantly impacted by digital transformation, including teaching and learning management, learner development, and school administration. Particularly in basic education, schools play a crucial role in establishing a strong foundation for learners, preparing them to become quality citizens in the future. Consequently, the enhancement of educational quality has become an essential goal that must be pursued continuously and in alignment with the digital age.

The National Education Act B.E. 2542 (1999) emphasizes in Chapter 1, Section 6, that education should aim to develop Thai people into well-rounded individuals—physically, mentally, intellectually, and morally—equipped with ethics, cultural values, and the ability to live harmoniously with others. Chapter 4, Section 22, emphasizes that all learners have the potential to



learn and develop themselves, with the learner being regarded as the most critical stakeholder in education. Educational processes should promote the natural and full potential development of learners. Section 26 mandates that educational institutions evaluate learners based on their development, behavior, participation in activities, and performance in both tests and learning processes, adapted appropriately for each educational level and form (*National Education Act B.E. Prof. 1999. 3-7*).

Furthermore, the Constitution of the Kingdom of Thailand B.E. 2560 (2017) and the National Education Act B.E. 2542 (1999), as amended, highlight the importance of policies aimed at strengthening human resource capacity. These policies emphasize the development of learners across all age groups, from early childhood, primary, and secondary education to those requiring special care. The aim is to holistically prepare learners physically, mentally, emotionally, socially, and intellectually. Learners should have the skills, knowledge, and discipline to be self-directed learners, with the ability to plan their lives and financial futures appropriately, and to live with dignity.

In response to the transformations of the 21st century, there is a need to redesign learning systems to support lifelong learning. This approach enables learners to direct their learning independently, even after leaving the formal education system. It also emphasizes recognizing the diversity of human intelligence and fostering talented individuals in various fields. Additionally, there is a focus on cultivating healthy habits, promoting physical fitness, and developing athletic skills toward excellence and career opportunities in sports (Office of Policy and Planning for Basic Education, 2020: 11).

Academic collaboration network management is one of the strategies that can effectively promote the development of education quality. It involves cooperation through coordination, sharing of resources, and the exchange of knowledge and experiences among educational agencies, schools, teachers, parents, communities, and external organizations. Building collaboration within academic networks can support the enhancement of education quality effectively, both in terms of learner development and teacher capacity building.

Given the background and importance of these issues, the researchers conducted a study on the current state of academic collaboration network management to improve the quality of education in the digital era under the jurisdiction of the Ubon Ratchathani Primary Educational Service Area Office 2. The aim is to propose appropriate, high-quality, and efficient management



approaches for academic collaboration networks to enhance the quality of education in the digital era, meeting educational demands while sustainably elevating education quality in the long term.

Research Objectives

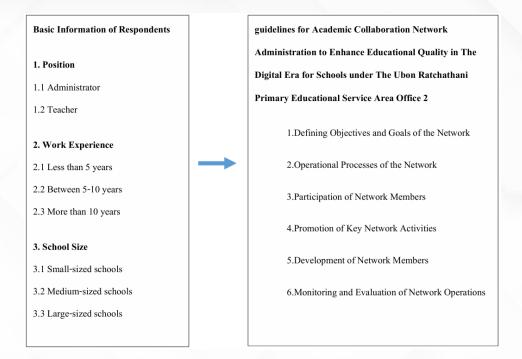
- 1. To study the current state of Academic Collaboration Network Administration to Enhance Educational Quality in The Digital Era for Schools under The Ubon Ratchathani Primary Educational Service Area Office 2
- 2. To compare the state of Academic Collaboration Network Administration to Enhance Educational Quality in The Digital Era for Schools under The Ubon Ratchathani Primary Educational Service Area Office 2, classified by position, work experience, and school size.
- 3. To explore the guidelines for Academic Collaboration Network Administration to Enhance Educational Quality in The Digital Era for Schools under The Ubon Ratchathani Primary Educational Service Area Office 2.

Research Methodology

The researcher defined the scope of the study by focusing on the guidelines for Academic Collaboration Network Administration to Enhance Educational Quality in The Digital Era for Schools under The Ubon Ratchathani Primary Educational Service Area Office 2. Relevant concepts, theories, and previous research were reviewed and used to develop the research framework, which includes the following variables: independent variables and dependent variables.



Research Framework



Population

The population for this study consists of school administrators and teachers in schools located in Trakan Phuet Phon District under the jurisdiction of the Ubon Ratchathani Primary Educational Service Area Office 2, totaling 1,080 people.

Sample

The sample for this study comprises 285 school administrators and teachers in Trakan Phuet Phon District under the jurisdiction of the Ubon Ratchathani Primary Educational Service Area Office 2. The sampling method used is stratified random sampling, with the sample size determined using the Krejcie and Morgan table (1970: 608-610). Additionally, six school administrators were selected for interviews using purposive sampling.

Research Instruments

Content Validity Assessment Form

This form, developed by the researcher, aims to gather expert opinions on the content validity and academic soundness of the proposed guidelines for academic collaboration network management to enhance educational quality in the digital era. It targets school administrators and teachers under the jurisdiction of the Ubon Ratchathani Primary Educational Service Area Office 2.



1. Questionnaire

The questionnaire was designed and developed by the researcher to study the management of academic collaboration networks for enhancing educational quality in the digital era. It is divided into three sections as follows:

Section 1: A checklist-style section that collects general information about the respondents, including their position, work experience, and school size.

Section 2: This section consists of a 5-point Likert scale rating to assess the current state of academic collaboration network management in six dimensions: Defining objectives and goals of the network. Operational processes of the network. Participation of network members. Promotion of key network activities. Development of network members. Monitoring and evaluation of network operations. The response scale includes five levels: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree.

Section 3: This section includes open-ended questions designed to explore in-depth insights and guidelines regarding the six dimensions of academic collaboration network management in the digital era for schools in Trakan Phuet Phon District under the jurisdiction of the Ubon Ratchathani Primary Educational Service Area Office

2. Structured Interview Form

A structured interview guide was developed to collect qualitative data on the six dimensions of academic collaboration network management, which include: Defining objectives and goals of the network. Operational processes of the network. Participation of network members. Promotion of key network activities. Development of network members. Monitoring and evaluation of network operations.

Development of Research Instruments

The process of developing the research instruments was carried out through the following steps:

- 1. The researcher studied textbooks, documents, articles, and academic works related to the principles, concepts, conditions, and problems of academic collaboration network management for enhancing educational quality in the digital era.
- 2. Preliminary Data Analysis. The researcher analyzed preliminary data to determine the conceptual framework of the research.



- 3. The researcher identified and examined key variables by reviewing relevant documents and research studies.
- 4. The researcher developed a 5-level Likert scale questionnaire to serve as the primary tool for data collection.
- 5. The draft questionnaire was submitted to the advisory committee for review and revisions, ensuring the language and content were accurate and comprehensive.
 - 6. Feedback and identified issues were used to improve and refine the questionnaire.
- 7. The revised questionnaire was submitted to five experts for critique and validation. The Index of Item-Objective Congruence (IOC) was calculated.
- 8. Suggestions and critiques from the experts were used to further refine the questionnaire. The improved version was finalized for use in data collection.
- 9. The revised questionnaire was tested with 50 school administrators, teachers, and educational personnel in Trakan Phuet Phon District under the Ubon Ratchathani Primary Educational Service Area Office 2 who were not part of the sample group. The reliability was analyzed using Cronbach's alpha coefficient, yielding a reliability value of .84
- 10. Based on the results of the pilot test, the questionnaire was further revised and finalized for use in the main data collection process.

Statistics Used in Data Analysis

- 1. Statistics for Evaluating Instrument Quality: These included content validity, assessed using the Index of Item-Objective Congruence (IOC), and item discrimination power, calculated by determining the correlation between individual item scores and the total score using Pearson's simple correlation coefficient (Boonchom Srisawat et al., 2008: 85-87). The reliability of the instrument was evaluated using Cronbach's Alpha coefficient (Boonchom Srisawat et al., 2008: 85-87).
 - 2. Basic Statistics: These included percentage, mean (\bar{x}) , and standard deviation (S.D.).
- 3 . Statistics for Hypothesis Testing: These included the t-test and One-way ANOVA. If significant differences were found, pairwise comparisons were conducted using Scheffé's method (Boonchom Srisawat et al., 2008: 88).

In this study, the researcher developed and refined the research instrument by following these steps. The researcher reviewed concepts, theories, documents, textbooks, and related



research studies to serve as a basis for designing the questionnaire. The initial version of the questionnaire was sent to experts for review to assess its content validity. The Index of Item-Objective Congruence (IOC) was calculated, with a selection criterion set at 0.60 or higher. Adjustments were made according to the experts' suggestions, resulting in IOC values ranging between 0.80 and 1.00.

The revised questionnaire was then pilot - tested with 50 educational administrators and teachers from primary schools in Trakan Phuet Phon District, Ubon Ratchathani Province, who were not part of the study's sample group. The reliability of the questionnaire was assessed using Cronbach's Alpha coefficient, yielding a reliability score of .84 for the entire instrument. The questionnaire was subsequently refined and finalized for data collection with the target sample.

Data Analysis

- 1. Quantitative data were analyzed by following these steps: the researcher first checked the completeness of the questionnaire responses, assigned scores based on the scoring criteria, and calculated frequency, percentage, mean (\bar{x}) , and standard deviation (S) using a computer software program. The data were further analyzed using statistical tests, including t-test and F-test (ANOVA). When differences were identified, pairwise comparisons were conducted using Scheffé's method.
- 2. Data from open-ended questions related to the use of academic collaboration network management for improving educational quality in the digital era within schools in Trakan Phuet Phon District, under the Ubon Ratchathani Primary Educational Service Area Office 2, were analyzed using content analysis.

Statistics Used in Data Analysis

- 1. Descriptive Statistics: These included frequency, percentage, mean $\bar{\mathbf{X}}$, and standard deviation (S.D.), used to describe general data.
- 2. Inferential Statistics: These included t-test and F-test (ANOVA). When significant differences were found, pairwise comparisons were performed using Scheffé's method.

Research Findings

1. The results of data analysis revealed the mean and standard deviation of guidelines for managing academic collaboration networks to improve educational quality in the digital era in



schools under Trakan Phuet Phon District, under the Ubon Ratchathani Primary Educational Service Area Office 2. Overall, the level was rated as very high $\bar{X} = 4.59$. When considering each aspect, ranked from highest to lowest, the results were as follows: (1) promoting key network activities $\bar{X} = 4.63$, (2) developing network members $\bar{X} = 4.60$, (3) monitoring the network's operations $\bar{X} = 4.60$, (4) defining the network's objectives and goals $\bar{X} = 4.59$, (5) operational processes of the network $\bar{X} = 4.58$, and (6) participation of network members $\bar{X} = 4.52$.

- 2. A comparison of the differences in the mean scores regarding the management of academic collaboration networks to improve educational quality in the digital era in schools under Trakan Phuet Phon District, categorized by various factors, yielded the following results:
- 2.1 The overall management of academic collaboration networks and each sides differed significantly at the .05 level. However, the aspects of operational processes and the development of network members did not show significant differences.
- 2.2 The overall, there were no significant differences in the management of academic collaboration networks based on work experience. However, significant differences at the .05 level were found in the aspects of operational processes, the development of network members, and the promotion of key network activities.
- 2.3 The overall management of academic collaboration networks and each sides differed significantly at the .05 level based on school size. However, the aspect of defining the network's objectives and goals did not show significant differences.
- 3. The management of academic collaboration networks under the Ubon Ratchathani Primary Educational Service Area Office 2 encompasses six aspects as follows 1) Defining Objectives and Goals of the Network: Members of the network should collaborate to determine the goals for improving educational quality in the digital era with a shared understanding. They should provide suggestions, listen to one another, and incorporate feedback from network members. 2) Operational Processes of the Network: Network members should utilize technology to support the execution of their responsibilities and to analyze problems, obstacles, and solutions for working effectively. Activities should include the establishment of shared rules and agreements to improve educational quality in the digital era. 3) Participation of Network



Members: Members should be encouraged to exchange knowledge via technology on topics such as educational assessments and research. They should also engage in activities such as training, seminars, and study visits to develop media, innovations, and technologies to improve educational quality. 4) Promoting Key Network Activities: A quality communication technology system should be implemented to support effective collaboration. Activities should utilize technology to emphasize, review, and maintain the goals and direction of operations. Members should engage in exchanging and accepting feedback through technology systems. 5) Developing Network Members: The network should employ techniques and strategies to encourage teachers and school staff to actively and clearly participate in improving educational quality in the digital era. The network should also support and continuously develop the knowledge and skills of teachers and other school personnel. 6) Monitoring the Network's Operations: There should be regular monitoring, reflection, and improvement of the network's operations based on the established steps for managing academic collaboration in the digital era.

Discussion of Results

The findings from this research on the Academic Collaboration Network Administration to Enhance Educational Quality in The Digital Era for Schools under The Ubon Ratchathani Primary Educational Service Area Office 2 in Thailand can be discussed as follows:

1. The current state of Academic Collaboration Network Administration to Enhance Educational Quality in The Digital Era for Schools under The Ubon Ratchathani Primary Educational Service Area Office 2 was found to be at the highest overall level. When ranked by aspects, the results were as follows: (1) promoting key network activities, (2) developing network members, (3) monitoring the network's operations, (4) defining the network's objectives and goals, (5) operational processes of the network, and (6) participation of network members. These findings reflect the readiness of school administrators and teachers within the Ubon Ratchathani Primary Educational Service Area Office 2. They possess the knowledge, understanding, and skills necessary to work collaboratively within the network. Furthermore, they demonstrate responsibility, academic leadership, good interpersonal relationships, creativity, democracy, and delegation of power, emphasizing the importance of personnel development within the network. Achieving success in managing academic collaboration networks in the digital era relies on organizing development activities and encouraging participation from network members. This aligns with Sasiwan



Thanipoon (2023), who highlighted that networks should hold meetings to exchange experiences, share information openly, and coordinate in various forms. Reflection on the overall success of network activities should be conducted through learning exchange activities such as Open Class at the network level. This also concurs with Jirarat Wongyotha (2024), who found that participation in the network requires further development to enhance operational efficiency. Similarly, Saiwinid Duangsanam (2018) stated that community involvement in the context of expanding educational opportunities in schools is at a high level, particularly in implementing and supporting teaching and learning activities.

2. Comparison of academic cooperation network management to improve the quality of education in the era digital of schools under the Ubon Ratchathani Primary Educational service Area office 2 1) according to the results of the research found that opinions on community participation in the management of the cooperation network. The academics of the respondents as a whole and individually differed statistically significantly at the level of .05. Consistent with the assumption, which shows that both executives, teachers or other personnel have opinions that different about the participation of management, the network of academic cooperation to improve quality. Education in the digital age The cause may be caused by a mutual misunderstanding of the academic management goals of Educational institutions, which is different from the research of Thanakij Plugthaisong (2022), which has consistent results in giving opinions about the management of the academic cooperation network by the research indicates that the opinion does not affect the opinion. Regarding the management of the academic cooperation network, it may be because there are factors that affect the opinion that different, such as the context of the school, the time to store data, etc. 2) Based on work experience research results show that the management of the academic cooperation network is based on work experience. Of the respondents in general and individual aspects are not different, which is not consistent with the assumptions set out. The cause may be caused by people with different work experiences. Have a perspective and understanding of the role of the community in different academic management processes which are different from the research of Pratchaya and Chulaphanbhorn (2018: 1-51) That found that work experience is an important variable that affects opinions about community participation in Educational Management of Thai Rath Wittaya 77 School 3) According to the size of the educational institution, it was found that teachers who worked in Educational institutions of different sizes have a level of opinion on the management of the



executive's academic cooperation network. Educational institutions are statistically significantly different at the level of .05, consistent with the base because Educational institutions of different sizes have cooperative network management and academic administration in each. Schools have different complexities, especially the roles, duties and responsibilities of teachers, and the constraints of Educational institutions in the budget for small schools and medium-sized schools to be allocated. The budget is less than large schools and extra large schools, which lacks flexibility in Network management also affects the organization of teaching and learning activities and the shortage of personnel to come in. As for the participation in academic work seriously in accordance with Manita Suthiha (2013), it was found that the service Educational institutions and teachers in primary schools of different school sizes participate in the administration. Academics are statistically significantly different. In accordance with Weerasak (2014), studying participation in Academic management of teachers found that examine teachers who worked on the scale of educational institutions participated in Overall academic management is significantly different in static importance.

3. The management of academic collaboration networks under the Ubon Ratchathani Primary Educational Service Area Office 2 encompasses six aspects as follows 1) Defining Objectives and Goals of the Network: Members of the network should collaborate to determine the goals for improving educational quality in the digital era with a shared understanding. They should provide suggestions, listen to one another, and incorporate feedback from network members. 2) Operational Processes of the Network: Network members should utilize technology to support the execution of their responsibilities and to analyze problems, obstacles, and solutions for working effectively. Activities should include the establishment of shared rules and agreements to improve educational quality in the digital era. 3) Participation of Network Members: Members should be encouraged to exchange knowledge via technology on topics such as educational assessments and research. They should also engage in activities such as training, seminars, and study visits to develop media, innovations, and technologies to improve educational quality. 4) Promoting Key Network Activities: A quality communication technology system should be implemented to support effective collaboration. Activities should utilize technology to emphasize, review, and maintain the goals and direction of operations. Members should engage in exchanging and accepting feedback through technology systems. 5) Developing Network Members: The network should employ techniques and strategies to encourage teachers and school



staff to actively and clearly participate in improving educational quality in the digital era. The network should also support and continuously develop the knowledge and skills of teachers and other school personnel. 6) Monitoring the Network's Operations: There should be regular monitoring, reflection, and improvement of the network's operations based on the established steps for managing academic collaboration in the digital era.

Recommendations

- 1. Recommendations for Applying the Research Findings based on the research findings, the management of academic collaboration networks to improve educational quality in the digital era in schools under Trakan Phuet Phon District, Ubon Ratchathani Primary Educational Service Area Office 2, revealed that participation of network members was the lowest among all aspects, followed by the operational processes of the network. The following recommendations are proposed:
- 1.1 Promote knowledge sharing through technology on topics such as educational assessment and research. Encourage participation in activities such as training, seminars, and study visits to develop educational media, innovations, and technologies for improving educational quality.
- 1.2 Support network members in using technology to enhance their tasks and fulfill their responsibilities effectively. Technology should also be utilized for analyzing problems, identifying obstacles, and finding solutions efficiently. Activities should be organized to establish shared rules or agreements for improving educational quality in the digital era.

2. Recommendations for Future Research

- 2.1 Future studies should explore the opinions of school board members regarding the management of academic collaboration networks to improve educational quality in the digital era.
- 2.2 Research should be conducted on effective approaches for managing academic collaboration networks to improve educational quality in the digital era.

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Needs Assessment to Develop Transformational Leadership of Middle Level Administrators of Arts Universities in Western China

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Abstract

Transformational leadership is significant for administrators due to its positive impact on organizational culture, staff motivation, and overall organization improvement. The purpose of this research was to investigate existing situations and desirable situations, and the needs to develop transformational leadership of middle level administrators of art universities in western China. The population included the 47 deans and the 2,638 teachers of four art universities in western China. The samples were 24 administrators and 331 teachers obtained through stratified random sampling. The research instrument was a constructed 5-rating scale questionnaire. Statistics for data analysis contained mean and standard deviation for existing and desirable situations, and Modified Priority Needs Index for the needs. The findings revealed that the existing situation was rated at the high level whereas the desirable situation at the very high level. The needs to develop transformational leadership based on its four elements are ranked in a descending order from the PNI_{modified} as Intellectual Stimulation, Individualized Consideration, Inspirational Motivation, and Idealized Influence. This indicates that it is worth developing transformational leadership for the administrators of the art universities in western China.

Keyword: existing and desirable situations, transformational leadership, middle level administrators, arts universities, western China



Introduction

The dynamic landscape of higher education in China, particularly within the arts, necessitates a leadership approach that can adapt to rapid changes and foster an environment of creativity and innovation. Transformational leadership, a leadership style where leaders inspire and motivate their followers to exceed their own self-interests for the good of the organization, fostering an environment of trust, innovation, and personal growth (Burns, 1978), has emerged as a critical model for educational leaders. Transformational leadership significantly benefits higher education by fostering a culture of innovation, collaboration, and continuous improvement. Leaders who adopt this style inspire and motivate faculty and staff to pursue a shared vision, which enhances institutional performance and student outcomes (Berkovich, 2016).

The scope of this research covers the existing situation and the desirable situation and the needs to develop transformational leadership among middle-level administrators at art universities in western China. There are four comprehensive art universities in western China: Guangxi Art University, Yunnan Art University, Inner Mongolia Art University, and Xinjiang Art University. These art universities provide multi-disciplines and multi-level comprehensive arts with music, fine arts, designs, drama and other art majors. The art universities in western China face unique challenges and opportunities. These institutions are tasked with preserving and promoting cultural heritage while simultaneously pushing the boundaries of artistic expression and innovation. Middle level administrators are the deans of the secondary institutions of the art universities. They play a pivotal role in navigating these complexities as they are often the bridge between the strategic vision of senior leadership and the operational realities of faculty and staff. Transformational leadership of them is essential for fostering a thriving academic and creative environment.

This study sought to explore the current state of transformational leadership among these administrators, identifying both strengths and areas for improvement. By examining the existing leadership practices, the research highlighted the gaps between the current and desired states of transformational leadership. Furthermore, it delved into the specific needs and conditions necessary to cultivate transformational leadership within this context. This included understanding the professional development requirements, institutional support mechanisms, and cultural factors that influence leadership practices.



The significance of this research lies in its potential to inform policy and practice within art universities in western China. By providing a comprehensive analysis of the existing and desired leadership situations, the study aimed to offer actionable insights that can guide the development of targeted leadership programs and initiatives. Ultimately, fostering transformational leadership among middle level administrators can lead to enhanced organizational performance, improved staff morale, and a more vibrant and innovative academic community. It is, therefore, worth investigating the existing and desirable situations and the needs to further propose development of transformational leadership for the middle level administrators of the art universities in western China.

Research Objective

The purpose of this research was to investigate the needs to develop transformational leadership of middle level administrators of art universities in western China.

Research Methodology

The population were 2,685 faculty staffs, included 47 deans and 2,638 teachers of the art universities in western China. The samples were 355 faculty staffs, the size of the sample was compare total population to Krejcie and Morgan's table, included 24 deans and 331 teachers. The samples were random through sampling technique. The population and the samples are classified according to the universities and shown in Table 1.

Table 1

The population and the samples

TT-::	Population		Sam	ples	Total	
University	Deans	Teachers	Deans	Teachers	Population	Sample
Guangxi Art University	15	980	8	123	995	131
Yunnan Art University	12	690	6	87	702	93



** **	Population		San	nples	Total	
University	Deans	Teachers	Deans	Teachers	Population	Sample
Xinjiang Art	10	490	5	(0)	400	(5
University	10	480	5	60	490	65
Inner Mongolia	10	400	5	61	400	((
Art University		488	5	61	498	66
Total	47	2,638	24	331	2,685	355

The research instrument was a constructed 5-rating scale questionnaire. To construct and pilot the questionnaire, principles and methods in constructing 5-rating scale questionnaire were studied. After that, a questionnaire was drafted. It was then submitted to the research advisor and five experts to evaluate the congruence of items and term definitions of each aspect. The content validity of the questionnaire was analyzed to find the Index of Congruence (IOC range of .05-1.00). The questionnaire was piloted among 30 non-sample respondents to find out the discrimination of each item by using Item-total correlation and the reliability of questionnaire by using Cronbach's alpha coefficient.

For data collection, an official letter together with a copy of questionnaire was e-mailed from the Faculty of Education and Human Development, Roi Et Rajabhat University to the samples.

For data analysis, the completion of questionnaire responses obtained back from the samples were checked. The researcher emailed the questionnaire by means of Google Form to 335 samples. Responses were received back from the 335 samples (100 %). To analyze the existing situations, and the desirable situations, average means and standard deviations were calculated. The average means were interpreted according to the following criteria.

4.51 - 5.00	Existing/ Desirable situation at "Very high" level
3.51 - 4.50	Existing/ Desirable situation at "High" level
2.51 - 3.50	Existing/ Desirable situation at "Moderate" level
1.51 - 2.50	Existing/ Desirable situation at "Low" level
1.00 - 1.50	Existing/ Desirable situation at "Very low" level



To examine the needs to develop transformational leadership of middle level administrators of the art universities in western China, Modified Priority Needs Index was analyzed. $PNI_{modified} = (I-D)/D$ (I = Important; average mean of desirable situations, D = Degree of success; average mean of existing situations).

Research Results

The existing situations and the desirable situations of transformational leadership of middle-level administrators investigated among the samples were analyzed through the average means and the standard deviations.

The results of the analysis of the needs to develop transformational leadership for middlelevel administrators are presented and described in detail as follows.

Table 2

I, D, PNI_{modified}, and order of the needs to develop transformational leadership of middle-level administrators

Elements of transformational leadership of middle-level administrators	I	D	$PNI_{modifled}$	Order of needs
1. Idealized Influence	4.75	3.74	0.270	4
2. Inspirational Motivation	4.77	3.73	0.278	3
3. Intellectual Stimulation	4.76	3.69	0.291	1
4. Individualized Consideration	4.76	3.69	0.290	2
Total			0.282	

Table 2 indicates that the needs to develop transformational leadership of middle-level administrators are ranked only from the items with PNI_{modified} higher than the total PNI_{modofied} (0. 282) from the highest to the lowest as 3. Intellectual Stimulation, ,4. Individualized Consideration. The four elements in a descending order from their priority as *Intellectual Stimulation, Individualized Consideration, Inspirational Motivation*, and *Idealized Influence* respectively.



The results of the analysis of the needs to develop transformational leadership in the four elements are separately presented in the following tables.

Table 3

I, D, PNI_{modified} and order of the needs to develop transformational leadership of middle-level administrators in the element of Idealized Influence

Transformational leadership of middle-level administrators in the element of Idealized Influence	I	D	PNI _{modifled}	Order of
1. The dean behaves in admirable ways.	4.70	3.66	0.285	3
2. The dean displays convictions and takes stands that cause followers to identify with the leader who has a clear set of values.	4.76	3.76	0.266	6
3. The dean acts as a role model to set up a good image with confidence, and self-esteem.	4.75	3.76	0.261	8
4. The dean gains respect and trust from followers.	4.74	3.74	0.269	5
5. The dean is guiding followers by providing them with a sense of meaning and challenge.	4.70	3.65	0.287	1
6. The dean shows a well-respected image.	4.75	3.76	0.265	7
7. The dean is able to articulate his/her thoughts, feelings, and actions.	4.79	3.84	0.247	10
8. The dean is able to solve complex problems systematically.	4.76	3.72	0.281	3
9. The dean provides security for creative work.	4.77	3.70	0.287	1
10. The dean has a good morality, and gains respect and trust.	4.81	3.84	0.253	9
Total	4.75	3.74	0.270	



In Table 3, the needs to develop transformational leadership of middle-level administrators in the element of idealized influence are ranked only from the items with $PNI_{modified}$ higher than the total $PNI_{modofied}$ (0.270) from the highest to the lowest as 5. The dean is guiding followers by providing them with a sense of meaning and challenge., 9. The dean provides security for creative work., 1. The dean behaves in admirable ways., and 8. The dean is able to solve complex problems systematically.

Table 4

I, D, PNI_{modified}, and order of the needs to develop transformational leadership of middle-level administrators in the element of Inspirational Motivation

Transformational leadership of middle-level administrators in the element of Inspirational Motivation	I	D	PNI _{modifled}	Order of needs
1. The dean articulates a vision that is appealing to and inspires the followers with high standards.	4.78	3.74	0.278	6
2. The dean is able to convey essential concepts to faculty staff that cause followers to identify with the leader who has a clear set of values.	4.79	3.78	0.269	9
3. The dean has high intelligence in short-term and long-term planning that is adaptable to change.	4.78	3.70	0.29	2
4. The dean communicates optimism about future goals.	4.77	3.77	0.266	12
5. The dean has good communication skills and can guide others.	4.80	3.78	0.27	7
6. The dean sets high standards for working and believes in achieving goals.	4.77	3.76	0.267	10
7. The dean provides the followers to convey their ideas.	4.77	3.72	0.284	4
8. The dean provides the followers to transcend their personal interests.	4.70	3.58	0.311	1



Transformational leadership of middle-level administrators in the element of Inspirational Motivation	I	D	PNI _{modifled}	Order of needs
9. The dean provides the followers to work together to achieve great causes.	4.75	3.69	0.287	3
10. The dean creates willingness, pride, and unity when working together.	4.74	3.74	0.270	7
11. The dean promotes teamwork culture and values.	4.77	3.76	0.267	10
12. The dean always thinks positively and solves problems optimistically.	4.80	3.75	0.279	5
Total	4.77	3.73	0.278	

From Table 4, the needs to develop transformational leadership of middle-level administrators in the element of inspirational motivation are ranked only from the items with PNI_{modified} higher than the total PNI_{modofied} (0.278) from the highest to the lowest as 8. The dean provides the followers to transcend their personal interests., 3. The dean has high intelligence in short-term and long-term planning that is adaptable to change., 9. The dean provides the followers to work together to achieve great causes., 7. The dean provides the followers to convey their ideas., and 12. The dean always thinks positively and solves problems optimistically.

Table 5I, D, PNI_{modified}, and order of the needs to develop transformational leadership of middle-level administrators in the element of Intellectual Stimulation

Transformational leadership of middle-level administrators in the element of Intellectual Stimulation	I	D	PNI _{modified}	Order of needs
1. The dean challenges the assumptions, takes risks, and solicits followers' ideas.	4.75	3.66	0.2987	3
2. The dean stimulates and encourages creativity of followers.	4.74	3.68	0.288	5



Transformational leadership of middle-level	I	D	PNI _{modified}	Order of needs
administrators in the element of Intellectual				
Stimulation				
3. The dean encourages followers to be				
innovative and creative, springs from leaders	4.77	2 60	0.2971	4
who establish safe conditions for	4.//	3.68	0.29/1	4
experimentation and sharing ideas.				
4. The dean inspires followers to think about				
their conventional methods critically and share	4.75	3.7	0.2866	7
new ideas.				
5. The dean provides a framework for				
followers to see how they connect to the leader,	4.76	3.65	0.3058	1
organization, and each other.				
6. The dean provides a framework for	4.75	3.65	0.299	2
followers to see how they connect to the goal.	4./3	3.03	0.299	2
7. The dean motivates followers in working	4.76	2.7	0.297	
and supporting new ideas.	4.76	3.7	0.287	6
8. The dean allows followers to define the goal	4.80	3.79	0.2671	8
of their efforts.	4.80	3.19	0.20/1	8
Total	4.76	3.69	0.291	

According to Table 5, the needs to develop transformational leadership of middle-level administrators in the element of intellectual stimulation are ranked only from the items with PNI_{modified} higher than the total PNI_{modofied} (0.291) from the highest to the lowest as 5. The dean provides a framework for followers to see how they connect to the leader, organization, and each other., 6. The dean provides a framework for followers to see how they connect to the goal., 1. The dean challenges the assumptions, takes risks, and solicits followers' ideas., and 3. The dean encourages followers to be innovative and creative, springs from leaders who establish safe conditions for experimentation and sharing ideas.



Table6

I, D, PNI_{modified}, and order of the needs to develop transformational leadership of middle-level administrators in the element of Individualized Consideration

Transformational leadership of middle-level administrators in the element of Individualized Consideration	I	D	PNI _{modified}	Order of needs
The dean is down-to-earth and respects everyone's value.	4.79	3.72	0.286	4
2. The dean attends to each follower's needs.	4.73	3.55	0.331	1
3. The dean acts as a mentor or coach to followers.	4.72	3.60	0.313	2
4. The dean listens to the follower's concerns and needs.	4.75	3.70	0.281	7
5. The dean helps followers to maximize their potential.	4.75	3.65	0.3	3
6. The dean gives empathy and support to the followers.	4.77	3.72	0.283	5
7. The dean boosts the confidence of the faculty staff.	4.76	3.71	0.283	5
8. The followers have a will and aspirations for self-development.	4.81	3.80	0.265	9
9. The followers have intrinsic motivation for their tasks.	4.75	3.74	0.269	8
Total	4.76	3.69	0.290	

Based on Table 6, the needs to develop transformational leadership of middle-level administrators in the element of intellectual stimulation are ranked only from the items with $PNI_{modified}$ higher than the total $PNI_{modofied}$ (0.290) from the highest to the lowest as 2. The dean



attends to each follower's needs., 3. The dean acts as a mentor or coach to followers., and 5. The dean helps followers to maximize their potential.

Conclusion and Discussion

The results of the analysis of the needs to develop transformational leadership in the four elements are separately presented in the following.

- 1. The needs to develop transformational leadership of middle-level administrators are ranked in a descending order from their priority as *Intellectual Stimulation, Individualized Consideration, Inspirational Motivation,* and *Idealized Influence* respectively.
- 2. The needs to develop transformational leadership of middle-level administrators in the element of idealized influence are ranked only from the items with PNI_{modified} higher than the total PNI_{modofied} (0.270) from the highest to the lowest as 5. The dean is guiding followers by providing them with a sense of meaning and challenge., 9. The dean provides security for creative work., 1. The dean behaves in admirable ways., and 8. The dean is able to solve complex problems systematically.
- 3. The needs to develop transformational leadership of middle-level administrators in the element of inspirational motivation are ranked only from the items with PNI_{modified} higher than the total PNI_{modified} (0.278) from the highest to the lowest as 8. The dean provides the followers to transcend their personal interests., 3. The dean has high intelligence in short-term and long-term planning that is adaptable to change., 9. The dean provides the followers to work together to achieve great causes., 7. The dean provides the followers to convey their ideas., and 12. The dean always thinks positively and solves problems optimistically.
- 4. The needs to develop transformational leadership of middle-level administrators in the element of intellectual stimulation are ranked only from the items with PNI_{modified} higher than the total PNI_{modofied} (0.290) from the highest to the lowest as 2. The dean attends to each follower's needs., 3. The dean acts as a mentor or coach to followers., and 5. The dean helps followers to maximize their potential.

The findings of this research reveal critical insights into the transformational leadership practices among middle-level administrators at art universities in western China.



Idealized Influence Administrators demonstrated a high level of confidence, morality, and the ability to inspire respect and trust. However, areas such as systematically solving complex problems and providing a sense of meaning and challenge require further development to align with the very high expectations of stakeholders.

Inspirational Motivation While the existing situation indicates that administrators effectively articulate visions and set high standards, the findings suggest the needs to further emphasize transcending personal interests and fostering collaboration for great causes.

Intellectual Stimulation Administrators are proficient in encouraging innovation and critical thinking among their teams, yet there is room for improvement in creating robust frameworks for staff to connect with organizational goals and their roles.

Individualized Consideration Despite a strong foundation in respecting individual values and supporting staff development, more personalized mentoring and attention to individual needs were identified as priority areas for enhancement.

The PNI_{modified} analysis ranks Intellectual Stimulation as the highest priority for development, followed closely by Individualized Consideration. Inspirational Motivation and Idealized Influence were also deemed essential but of relatively lower immediate priority. This prioritization provides a strategic roadmap for addressing the specific needs of transformational leadership development.

Recommendations

Based on the research result findings, the following recommendations are proposed to bridge the gap between the existing and the desirable situations of transformational leadership among the middle-level administrators:

Professional Development Programs

Design and implement training programs that focus on advanced problem-solving, innovative thinking, and fostering creativity.

Incorporate case studies, workshops, and mentoring sessions that emphasize personalized leadership approaches and critical thinking.



Mentorship and Coaching Systems

Establish mentorship frameworks where experienced leaders guide less experienced administrators in implementing transformational leadership practices.

Encourage a culture of peer coaching to share best practices and foster collaboration.

Policy and Institutional Support

Develop policies that provide administrators with resources and support to implement innovative ideas and motivate their teams effectively.

Recognize and reward transformational leadership behaviors to encourage sustained commitment.

Periodic Leadership Assessment

Conduct regular evaluations to assess progress in leadership development and adjust training programs accordingly.

Utilize feedback from faculty and staff to refine leadership strategies and address emerging challenges.

Integration of Cultural Sensitivity

Tailor leadership training programs to incorporate the unique cultural and artistic contexts of western China's art universities.

Promote practices that honor cultural heritage while fostering modern leadership principles.

By implementing these recommendations, art universities in western China can cultivate transformational leadership among their middle-level administrators. This, in turn, will enhance institutional performance, promote staff morale, and foster a vibrant academic and creative environment that aligns with the institutions' strategic objectives.

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Genre-based Approach in EFL: A Review of Applications in a Genre-based Writing Instruction in Thai Contexts

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ABSTRACT

Genre is a crucial concept in learning and teaching English. Linguistic and pedagogical scholars utilize a genre-based approach to teach English writing courses to EFL students effectively. This approach emphasizes the analysis of the rhetorical structure and linguistic features of various textual conventions. This paper reviews genre theories from three schools: New Rhetoric (NR), Systemic Functional Linguistics (SFL), and English for Specific Purposes (ESP), along with their applications in a genre-based linguistic approach, drawing on previous studies. The objectives of this paper are to clarify the notion of GBA theories and to discuss the applications of GBA in the writing classroom. Empirical studies of GBA have been conducted at the undergraduate level. The data and methodology of this genre-based approach concentrate on language and composition across different contexts. Therefore, this article will discuss previous studies' relevant data and findings to indicate that GBA can benefit the pedagogical study of English writing in the Thai context.

Keyword: English language writing, Genre-based approach, Writing instruction



Introduction

Writing instruction in a second language (L2) context is often challenging. However, as Richards and Renandya (2002) have noted, difficulties also arise in first language (L1) settings. The challenges increase significantly in the English as a Foreign Language (EFL) context, where learners have limited exposure to English and the expectations of writing in English. This challenge is a global issue. For example, Lin (2003) highlights the difficulties in Singapore, where many students struggle to use English effectively for academic or real-life purposes despite completing English courses in secondary school. Similarly, Kim (2006) points out that Korean university students struggle to write compositions. Researchers like Foley (2005) have also reported challenges in teaching and learning writing in Thailand.

In addition to the well-known "product and process" approach to help English learners enhance their writing skills, a more recent methodology called the genre-based approach has been proposed for the Thai EFL contexts (Kongpetch, 2006; Walter-Echols, 2009). This genre-based approach is rooted in Systemic Functional Linguistics (SFL), which presents a language model that considers the context of the situation and culture. This model was initially developed by Martin (1984). It has since been refined by scholars Rothery (Callaghan and Rothery (1988) and Christie (1999).

Many EFL learners, particularly Thai students, tend to frame their ideas in their first language and translate them directly into English. This approach often leads them to overlook the appropriate sentence and paragraph structures and neglect the cohesion and coherence needed in their writing (Khumphee & Yodkamlue, 2017; Sermsook et al., 2017). Consequently, they face challenges in effectively conveying their content and ideas, which hinders their ability to create meaningful and purposeful compositions (Seensangworn & Chaya, 2017).

Moreover, in Thailand, many post-secondary English curricula employ a more conventional product-oriented approach (Loan, 2017; Ngamsomjit & Modehiran, 2022; Puengpipattrakul, 2014), which is less concerned with understanding the process behind the analysis of text for writing purposes, organization and lexico-grammatical knowledge of the text, and the audience. Consequently, inexperienced student writers may not know how to arrange ideas in appropriate patterns to respond to the purpose of their writing and satisfy readers' expectations. Furthermore, in product-oriented writing instruction, many students are not stimulated by the process and are



unaware of their role and responsibility in learning. As a result, anxiety, uneasiness, and reluctance to write may be accumulated (Boonyarattanasoontorn, 2017; Jarunthawatchai, 2018; Na Nan, 2017; Rodsawang, 2017) while their motivation to participate in writing activities and produce writing tasks independently actively may also be negatively affected, or diminish altogether. Thus, integrating genre-based teaching-learning activities into writing instruction could be a feasible solution to the above writing challenges. Therefore, this article will discuss the data and findings of previous studies that indicate that GBA can benefit the pedagogical study of English writing. Additionally, a frame is to a building what genre is to writing. As frames make it easier to build a building, genre-based writing makes learners feel easy and less burdened. Teachers feel more satisfied because they can provide their students with effective and practical methods in their writing classes. They can also give effective writing instruction to multi-leveled students with the genre-based approach and motivate slow learners to keep practicing various writing styles with more precise guidelines. In this sense, this paper attempts to suggest more successful writing instruction using a genre-based approach. This objective examines the stages of genre-based writing instruction for practical guidance. The benefits and limitations of genre-based writing instruction are also examined for more effective writing instruction suggestions.

Genre Theories

The concept of genre has historically been used to classify literary forms, such as ballads, novels, plays, poems, prose, and short stories, since the 1960s (Abdullah, 2009). From the 1970s onward, the term expanded to include academic and professional writing, such as abstracts, research articles, brochures, and company audits (Swales, 1990, 2004; Bhatia, 1993). Applied linguistics has also redefined the notion of genre, emphasizing its role as a set of communicative events with shared purposes within specific social and cultural contexts of speech and writing (Swales, 1990). While dictionary definitions describe genre as a category, type, or style, its practical applications demonstrate a more nuanced classification system.

Genre-based approach (GBA)

Teaching based on genre relies on the premise that effective writing stems from the writer's awareness of context and audience. The knowledge accumulated from writing texts in similar previous contexts can assist writers exceptionally well each time they attempt to start



writing a new text. However, student writers are better equipped to write influential texts when they employ knowledge of previously written texts with the ability to recognize text features. This section aims to review the significant genre-based writing approaches to writing pedagogy. These are Systemic Functional Linguistics (SFL) or the Sydney School of Genre, New Rhetoric (NR), and English for Specific Purposes (ESP). It should be noted that these genre orientations are overlapping (Johns, 2002).

Systemic Functional Linguistics (SFL)

The SFL genre approach, also known as the Sydney School, is based on Systemic Functional Linguistics by Michael Halliday (Halliday, 1994;). The SFL approach is "the most clearly articulated and pedagogically successful of the three orientations" (Hyland, 2004, p. 25). Generally, the SFL genre approach has been committed to and encouraged by a focus on language education. Within SFL, linguistics is seen as an effective tool practitioner can employ in the language classroom. This commitment to language and literacy enabled SFL theorists to provide a well-defined language teaching framework that caters to learners' linguistic needs at different stages (Hyland, 2007). Furthermore, because genre within SFL is conceptualized within a linguistic perspective, genres are characterized along general rhetorical functions such as expositions, recounts, narratives, and descriptions. This characterization of genre implies that genres denote groupings of texts within similar discoursal patterns. Within SFL genre pedagogy, teachers are encouraged to explicitly teach genres such as narration, exposition, argumentations, and explanation regarding their social purpose and the social context or location in which they are usually created (Paltridge, 2001, 2007). For instance, the purpose of writing the exposition genre is to provide an argument for the writer's thesis. The exposition genre is commonly found in essays, commentaries, and editorials (Butt et al., 2009). Classifying genres in this manner is helpful to teachers as it can reveal the linguistic demands that different genres require to be produced effectively. The exposition genre is more demanding than the recount genre since the former requires more complex lexico-grammatical choices. Thus, teachers within SFL are encouraged to teach genres with a gradual approach, starting with genres that are less demanding in terms of grammar, vocabulary, and organization and moving up to more complex and challenging ones. Moreover, genres should be taught with consideration to learners' current level of proficiency, meaning that teachers should teach less demanding genres, such as recount, to



beginner learners and teach more demanding genres, such as exposition and argumentation, to intermediate and advanced learners.

The New Rhetoric (NR)

The New Rhetoric (NR) approach to genre emerged in North America in the 1980s. Unlike SFL, which draws on a linguistic framework, the NR approach draws on social and literary theories (Bakhtin, 1986) and L1 composition studies in North America (Freedman & Medway, 1994). Although both SFL and NR agree on the role of context and that genres are socially rooted, NR theorists differ from SFL theorists as the former build on Bakhtin's notion of dialogism. Dialogism revolves around the assertion that although certain conventions characterize genres, they are much more flexible than the flexibility allowed by SFL (Bakhtin, 1986). As such, genres within the NR perspective are seen as more dynamic forms of social action that are "centered not on the substance or the form of the discourse but on the action [that are] used to accomplish" (Miller, 1994, p.24).

Unlike the SFL perspective, the NR school of genre is more interested in the ideological and rhetorical study of genres and less interested in linguistic analyses of texts for instructional purposes. Instead, NR is more devoted to describing and analyzing the social and cultural contexts in which genres are used through ethnographic studies of the actions these genres fulfill. By understanding such contexts, NR theorists argue, we can understand how meanings are constructed and negotiated. Although textual conventions are not overlooked, they are nonetheless not the center of attention but are seen as indications that people respond differently to recurrent situations in different cultural contexts (Hyland, 2004).

Furthermore, since NR focuses principally on social and cultural dynamics, NR researchers (e.g., Bawarshi, 2000; Coe et al., 2002; Devitt, 2008; Miller, 1994) are concerned with investigating the issue of power among genre users. Genre study within NR focuses more on experts' use of genre rather than novice learners. Additionally, NR theorists are skeptical of classroom-based genre instruction since they perceive genres as highly flexible rhetorical strategies used in the real world to achieve actual purposes rather than recurrent linguistic patterns that can be analyzed in the artificial classroom environment. As such, they argue that because genres are dynamic and not static, they cannot thus be taught in the classroom (Coe et al., 2002).



English for Specific Purposes (ESP)

Scholars from this genre school are interested in applying genre to teach and research the range of writings that ESL and EFL learners usually need to produce in professional and academic settings (Swales, 1990). The ability to write competently in professional contexts can determine ESL/EFL learners' future career success. Thus, ESP is concerned with how this group of learners develops meaning and structure while producing texts using genres valued in various professional and academic situations. Like SFL theorists, ESP researchers base their understanding and application of genre on linguistic grounds. Within ESP, genres are conceptualized as text types characterized by specific formal features and communicative purposes in social settings (Hyon, 1996). Swales (1990), whose work on "move analysis" was seminal in ESP genre analysis, defines genres as "communicative events" that have "communicative purposes" and are characterized by specific patterns of "structure, style, content, and intended audience" (p.58). While both SFL and EFL conceptualization of genre is motivated by linguistics, ESP researchers devote greater attention to investigating professional and academic genres' formal properties than their functions or social contexts. Building on Swales's (1990) pioneering work on structural move analysis, ESP researchers have analyzed texts in terms of their overall structural patterns. Examples of such analyses include Swales (1990), who analyzed organizational moves employed in writing research articles; move analysis in master dissertations by Dudley-Evans (1988); and analysis of business letters by Bhatia (1993).

ESP is a highly pragmatic genre approach that addresses ESL/EFL learners' local needs. Unlike SFL theorists who see genres as rhetorical strategies to achieve goals, ESP adherents seek to examine learners' communicative needs in professional settings. Hence, ESP researchers are interested in the specific routine practices of community members. Accordingly, genre is the property of those who use it in their closed communities (Hyland, 2004). Swales (1998) maintains that ESP understanding of genre allows individual writers to situate their needs by becoming members of professional groups. Such membership is thought to assist learners in understanding the communicative needs of the audience within a particular genre as well as the formal properties of texts produced in that genre.

Like SFL, the ESP genre approach is committed to language pedagogy. ESP researchers analyze genres used in the real world to provide teachers and students with linguistic tools (such



as move analysis) so that genre can be taught effectively and explicitly in the classroom (Paltridge, 2001). Unlike SFL, the ESP genre approach employs an eclectic pedagogical approach by translating research findings into materials that can be used in L2 tertiary contexts (Swales and Feak, 2011). Furthermore, ESP genre pedagogy practitioners are increasingly concerned with providing genre-based writing pedagogy that offers L2 learners the opportunity to analyze a wide variety of "professional" genres through, for instance, comparing multiple texts from different genres and keeping mixed-genre portfolios (Johns, 1997).

Genre analysis

Previous discussions have focused on the theoretical and practical relevance of the Genre-Based Approach (GBA), including its usefulness and its application in writing classrooms. Another important aspect is the analysis of text genres, which helps teachers and learners understand how genres are constructed and utilized. Additionally, genre analysis plays a role in developing GBA courses.

Here is a brief introduction of Bhatia's seven-step process analytical model. Based on Swales' CARS (Create a Research Space) model, Bhatia (1993) attempts to integrate sociology, psychological, and cognitive factors into the genre, proposing the seven-step process method to analyze unfamiliar genres in professional settings. He believes that in order to conduct a thorough investigation of any genre, one must consider some or all of the following seven steps (Bhatia, 1993, pp. 63-80):

Step 1: Placing the given genre text in a situational context

Step 2: Surveying existing literature

Step 3: Refining the situational/contextual analysis

Step 4: Selecting corpus

Step 5: Studying the institutional context

Step 6: Levels of linguistic analysis

- Level 1: Analysis of lexico-grammatical features

- Level 2: Analysis of text-patterning or textualization

- Level 3: Structural interpretation of the text-genre

Step 7: Specialist information in genre analysis



In addition, Bhatia (1993) offers the genre model of sales letters:

- 1) Establishing credentials
- 2) Introducing the offer/service
- 3) Offering incentive
 - a. Offering the product/service
 - b. Essential detailing of the offer
 - c. Indicating the value of the offer
- 4) Referring to enclosed documents
- 5) Inviting further communication
- 6) Using pressure tactics
- 7) Ending politely

As for Bhatia's genre analysis (1993), his work follows Swales's concept of genre analysis (move and step). However, he focuses more on the professional genres (e.g., sales letters, legal cases, etc.), while most of Swales's work emphasizes academic genres (e.g., introductions to articles, abstracts, etc.). Thus, Bhatia adds concepts that are useful for analyzing professional genres and applying the results to classroom instruction. Bhatia's genre analysis is based on three orientations: linguistic, sociological, and psychological (Bhatia, 1993). This means that one needs to analyze genres on the linguistic level. Also, one needs to be aware of how a particular genre defines, organizes, and communicates social reality because it is believed that the text cannot complete the purpose alone. An ongoing process of negotiation with the context is needed. Finally, one should pay attention to the tactical aspects of genre construction (psychology). It is these tactical choices or strategies that the writer uses to make their writing more effective. The primary purpose of genre analysis is to study how the communicative goals of professional communities are achieved in specific rhetorical contexts using structural forms appropriate to specific content (Bhatia, 1999).

Benefits of Genre-Based Instruction

Genre-based instruction offers a structured framework, which is particularly beneficial for L2 learners with limited exposure to authentic English writing. In this approach, writing is viewed as the reproduction of text based on models provided by the teacher. This guided process helps



students focus on production rather than the final product. By exposing learners to numerous examples of a specific genre, they can develop the ability to detect and replicate the typical features of that genre, activating prior knowledge and improving their writing skills (Badger and White, 2000).

Genre-based instruction reduces anxiety for beginner or intermediate-level students by providing clear guidelines and familiar patterns. For instance, Henry and Roseberry's experiment (1998) demonstrated that students using genre-based methods performed better in writing tasks than those taught without them. The structured approach enhances understanding of rhetorical structures and linguistic features, making writing tasks less daunting and more achievable.

Teachers also benefit from genre-based instruction, which fosters active collaboration between instructors and students. Unlike process writing, where students independently navigate prewriting, drafting, and revising, genre-based instruction provides detailed models and guidelines, helping students understand linguistic conventions and rhetorical effects (Swales, 1990). This method allows teachers to offer practical and targeted support, making it a valuable tool for teaching and learning.

Limitations of Genre-Based Instruction

Despite its advantages, genre-based instruction is not without criticism. One concern is that it may overly constrain student creativity by focusing heavily on audience expectations and relying on model texts. While genre frameworks provide helpful guidelines, they can limit students' ability to think and express themselves freely (Swales and Feak, 2000). Another challenge lies in selecting authentic and suitable examples within a specific genre, particularly for non-native teachers who may lack access to or familiarity with authentic language use. Additionally, genre mixing, where one genre is embedded within another, complicates instruction. For example, a letter might incorporate elements of a story or advertisement, making it harder to teach distinct genre conventions (Bhatia, 1997). The success of genre-based instruction heavily depends on the teacher's ability to understand and effectively implement it. Instructors must carefully balance the structured nature of genre-based methods with opportunities for creativity and independent thinking. By doing so, they can overcome these limitations and use genre-based instruction as a powerful tool for teaching writing. Genre-based instruction in practice involves a



structured teaching-learning cycle with four primary stages, each aimed at enhancing students' writing abilities while promoting creativity and independence.

Genre-based teaching-learning cycle for writing instructions

Genre pedagogy within SFL draws on Vygotsky's (1986) concept of Zone Proximal Development (ZPD), which is the distance between what a learner can do independently and that which they need assistance with from a more knowledgeable person (usually the teacher). Accordingly, the teacher's role in SFL genre pedagogy is crucial in scaffolding student writers' improvement. SFL genre instruction is delivered through a cycle teaching model that comprises different instructional stages. Many scholars have proposed teaching-learning cycles related to the genre-based approach. This paper reviews Macken-Horarik (2002), Derewianka (2003), and Hyland (2004), as presented in Table 1.

Table 1

The teaching-learning stages of genre-based writing instructions

Macken-Horarik (2002)	Derewianka (2003)	Hyland (2004)
	1. Developing an	1. Setting the Context
	understanding of the field	
1. Modelling	2. Familiarization with the	2. Modelling and
	genre	deconstructing the context
2. Joint negotiation of text	3. Developing control over the	3. Joint Construction of the
	genre	text
3. Independent Construction of	4. Independent Construction	4. Independent Construction of
Text		the text
	5. Extending and Critiquing	5. Comparing Texts/Linking
		Related Texts
	6. Creative exploitation of the	
	genre	

Source: Adapted from Wiboonwachara and Charubusp (2022).



These three models share similar stages of genre-based writing instructions, especially in the early stages when non-expert student writers still require explicit genre knowledge instruction, practice, and support to produce independent writing. Hyland (2004, 2018) explained that at the initial stages of genre-based teaching, familiarization with the target genre and explicit instruction about genre knowledge is necessary to prepare students to accumulate adequate knowledge of the target genre to create their compositions independently and confidently. The following model of stages for writing lesson instruction aligns with the "Teaching-Learning Cycle" developed by Hammond (1987, 2001). These stages ensure a straightforward, step-by-step approach that enhances teaching effectiveness and student outcomes in L2 writing classes.

The following are the stages of genre-based writing instruction that have been proposed by Lee (2013):

- 1. Modeling: Teachers introduce students to the target genre by providing multiple examples and analyzing their key features. Through exposure to authentic texts, students identify elements such as purpose, structure, vocabulary, and grammar that define the genre. For instance, students examine sample reports to understand their format and content when teaching an informational report.
- 2. Joint Writing: This stage involves close collaboration between teachers and students. Teachers provide scaffolding while students begin to collect and organize information for their writing. Group activities, discussions, and collaborative writing exercises help students grasp the requirements of the target genre.
- 3. Independent Writing: Students construct texts independently while receiving teacher support. During this stage, explicit guidance on purpose, structure, and language features remains essential. For example, when writing a lab report, teachers can provide sentence starters or prompts to help students organize their work systematically.
- 4. Reflection: Students critically analyze their own and peers' writing to refine their skills. They are encouraged to explore creative variations within the genre framework, personalizing their content while adhering to its structural norms. Reflection fosters creativity and deepens their understanding of how the genre operates.



The application of genre-based approach from previous studies

In L2 classrooms in EFL contexts, scholars have integrated the genre-based approach to develop EFL writing skills and improve students' literacy skills, critical thinking, and content acquisition in specific writing courses. By examining the language features and the schematic structure of moves and steps, these studies illustrate how the GBA approach improves learners' writing and analytical skills.

Ueasiriphan and Tangkiengsirisin (2019) implemented a genre-based approach to teaching technical writing to Thai engineers, focusing on writing work instructions and the attitudes of Thai engineers toward this genre-based writing. Learning achievements have been examined using a comparison of pre-and post-tests for ten engineers in the same discipline, yet with different backgrounds of English proficiency. Lastly, a satisfaction interview of the overall course was conducted for four participants and showed that the engineers' attitudes were optimistic about the teaching method. Similarly, Hassan's (2020) study used the genre-based approach to develop EFL writing skills among student teachers at the Faculty of Education. After implementing the genre-based approach, the instrument was re-administered to (control and experimental) groups. The results were statistically analyzed and revealed that the experimental groups' EFL writing skills were developed using genre-based approaches. It is recommended that the genre-based approach be used in different educational stages for developing EFL writing skills.

In Thongchalerm and Jarunthawatchai's (2020) study,44 undergraduate students enrolled in a 12-week course in English writing for English teachers. The study evaluated the effectiveness of the teaching cycle adapted from the genre-based approach for teaching EFL learners in Thailand. A one-group pretest-posttest design was employed in the study. Quantitative results showed significant improvements in linguistic features and rhetorical organization, with most students achieving a 'Moderately Improved' level. Qualitative results indicated that students expressed positive attitudes towards autonomous and explicit learning. The students reflected that collaborative writing helped to improve their writing competence and increased their confidence in composing texts. The study concluded by stating the effectiveness of a genre-based approach to developing EFL writing competence.



Kongpetch (2006) conducted a study applying Systemic Functional Linguistics (SFL) and an ethnographic approach with 42 Thai EFL learners, focusing on the lexico-grammatical features of expository essays. Following the four teaching and learning cycles proposed by Hammond, Burns, Joyce, Brosnan, and Gerot (as cited in Kongpetch, 2006), Kongpetch developed teaching materials and a course rooted in the Genre-Based Approach (GBA) principles. The findings indicate that learners who engage with the SFL pedagogical model enhance their language awareness through diary writing, drafting their written work, and participating in classroom discussions. Based on teacher feedback and the students' writing engagement levels, this model appears to positively impact the development of linguistic features in learners' writing, including grammar and vocabulary.

Kawinvasin et al. (2021) used genre awareness to enhance business email Correspondence among EFL Students. In this study, the data was gathered from a class of business writing students by assigning three complaint email writing tasks that the students wrote independently. More interestingly, the data collected from students' post-test A after the class and post-test B a week after revealed that the distinct pedagogy of moves and steps (using Swales's move framework) dramatically and continuously enhanced students' ability to fulfill the tasks. The study discussed that the outcomes of students were the significant result of a unification of genre recognition, moves and steps, and practicing familiar tasks. These factors were crucial pedagogical instruments in helping students perceive and acquire proper writing styles.

Furthermore, Wiboonwachara and Charubusp (2022) implied Genre-Based Self-Regulated Instruction (GBSRI) to enhance the English writing ability of 32 Thai undergraduate students. This study compiled the quantitative and qualitative data, a GBSRI questionnaire, and semi-structured interviews. The pre-test and post-test results revealed that the participants' paragraph writing ability was significantly improved after participating in GBSRI. Moreover, the qualitative data from the questionnaires and the semi-structured interviews indicated that most students expressed satisfaction with GBSRI and acknowledged its benefits. Similarly, Thaksanan and Chaturongakul (2023) attempted to figure out how genre-based instruction affected the academic writing performance of EFL students. The study involved 56 undergraduate students in Thailand using pretest and post-test, student writing, student reflection, and semi-structured interviews. The key findings revealed that the target students improved their genre awareness in



four ways, i.e., audience awareness, purpose awareness, appropriate content, and textual features. In addition, they held positive attitudes toward genre-based instruction. This study provides a guideline for teachers and practitioners to incorporate genre-based instruction into teaching writing to improve students' writing proficiency.

Changpueng (2012) implemented a Genre-Based Approach (GBA) in an English for Specific Purposes (ESP) occupational course for 40 engineering students who were required to write requests and inquiries in emails and reports. Although the course materials and tasks were designed based on Bhatia's (1993) framework, the collected assignments were analyzed according to Swales' model. The activities utilized in the teaching and learning cycles were based on Feez (as cited in Changpueng, 2012) and were crafted to help learners understand genre knowledge and enhance their writing skills. As a result, students with varying levels of English proficiency could use appropriate language for their writing tasks. This finding indicates that the GBA experiment significantly improved the learners' writing, as evidenced by the differences in pre-test and post-test scores between the control and experimental groups.

According to previous studies and research conducted on genre-based writing instruction in EFL contexts, it can be stated that the outstanding characteristics of Systemic Functional Linguistics (SFL) genre-based writing instruction (the knowledge required to prepare for writing tasks along with explicit genre knowledge instruction, especially those about internal linguistic features and schematic structures of different text types), scaffolding and collaborative learning can help novice writers improve their writing ability. They can thus accumulate linguistic knowledge, content, ideas, and writing skills through a systematic genre-based teaching-learning cycle to accomplish the communicative purpose of each genre. These distinctive characteristics of SFL genre-based writing instruction seem suitable for EFL student writers, which can encourage them to independently compose drafts of their writing with more confidence.

Conclusion

Genre-based approaches (GBA) in the classroom should align with the relevant principles of the course curriculum, the cycles of teaching and learning, and the learners' context. Instructors should consider the target genre when considering the appropriate framework to guide learners in understanding how language is used within that genre. For example, they might employ Systemic



Functional Linguistics (SFL) for academic essays, Swales' genre analysis for academic research articles and reports, and Bhatia's approach for business letters. Suppose the writing course aims to develop learners' performance by enhancing their genre knowledge, understanding communicative purposes, and recognizing the roles of writers and readers. In that case, GBA can be a valuable pedagogical approach. It helps learners become more aware of the components involved in written tasks, such as vocabulary, grammatical structure, and textual organization. However, GBA might be perceived as less applicable if instructors provide overly simplified materials, which can limit learners' creative ideas (Badge and White, 2000). Moreover, instructors should consider the situational contexts of learners' backgrounds and the target genres (Byram, 2004) to ensure sufficiency. Overemphasis on genre knowledge may reduce motivation among active learners. Despite these concerns, applying GBA can be effective in the writing process approach (Badge and White, 2000). Thus, while the genre approach strongly emphasizes developing learners' writing products, designing and scaffolding the teaching and learning cycles is essential. This helps develop learners' writing processes through GBA investigation. Consequently, instructors can implement the GBA approach alongside the process approach in writing courses, creating a genre-process approach. Additionally, some necessary and relevant research highlights positive learning outcomes after implementing GBA at a higher education level. In addition, studies have been conducted on how to improve business English writing and how to assess students' ability to write specific types of text. Hence, the researcher will adopt the previously discussed framework to explore and illustrate the effectiveness of this genre-based approach in four business writing tasks to develop Thai EFL undergraduate business English writing ability.

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The Impact Factors of Critical Thinking and Leadership on Creativity of Teacher

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Abstract

This research studies the impact factors of critical thinking and leadership influence teacher creativity in Guangxi, China. Through documentary analysis, the study identifies key elements critical thinking components, including reflective judgment, analytical skill, and problem-solving abilities, show a fundamental role in enhancing educators' creative capacity. Similarly, transformational leadership serves as a vital enabler, offering intellectual motivation, personalized guidance, and a collaborative setting that cultivates innovation. Results indicate that innovative of self-efficacy facilitates the relationship between critical thinking, leadership, and enhanced teacher creativity. These findings within Guangxi's educational site, analyzing how local context, cultural elements, and institutional contexts influence these dynamics. This study establishes a framework for enhancing creativity by making practical recommendations for teacher development programs, emphasizing the combination of critical thinking and leadership skills. Additionally, it contributes to the educational innovation literature by providing a unique regional perspective, hence promoting the evolution of adaptive teaching approaches in China.

Keyword: critical thinking, leadership, creativity of teacher, self-efficacy



Introduction

Critical thinking ability and leadership are the two core qualities in teachers' career development. Critical thinking skills enable teachers to deeply analyze problems, and propose innovative solutions, while leadership enables teachers to effectively guide students and colleagues to achieve education, research, and management goals together. These two abilities are crucial to improving the innovation capacity and academic atmosphere of educational institutions.

Critical thinking, a cornerstone of modern education, has its conceptual roots in both Western and Chinese philosophical traditions, though its formal definition emerged only in the 20th century. John Dewey's concept of reflective thinking laid the groundwork for the contemporary understanding of critical thinking. In his seminal work *How We Think* (1910), Dewey emphasized active, persistent, and careful consideration of beliefs or assumed knowledge, alongside the importance of inquiry to uncover facts for validation. Reflective thinking involves a state of doubt followed by an active search for resolutions, highlighting the essential components of confusion and investigation. These principles not only define critical thinking but also establish its purpose as a vital tool for teaching students to think systematically and judiciously (Dewey, 1910; Dewey, 1933).

Over the decades, Dewey's reflective thinking has evolved into the broader concept of critical thinking, with scholars such as Glaser and Ennis expanding its dimensions. Critical thinking has come to encompass analytical reasoning, evaluation, and decision-making, distinguishing it as a multidisciplinary construct relevant to philosophy, psychology, and pedagogy. These developments were further enriched by the contributions of researchers like Paul and Elder, who emphasized the iterative nature of self-directed and self-corrective thinking (Paul & Elder, 2020). Contemporary perspectives view critical thinking as a multidimensional process, integrating skills, attitudes, and tendencies to foster informed and rational judgment, while its adaptability to diverse educational domains remains a focal point of academic discourse (Facione & Gittens, 2014). Despite its prominence in Western academia, the exploration of critical thinking in Chinese education gained momentum much later, primarily through the integration of global frameworks. Scholars such as Gu and Wu have noted that critical thinking in China emphasizes questioning and re-evaluating existing practices, yet challenges persist in achieving consensus on a universal definition (Gu & Liu, 2006; Wu, 2012). This research aims to contribute to the ongoing



dialogue by exploring the relationship between critical thinking and its role in enhancing creativity among educators, situating its analysis within a leadership framework that facilitates innovative teaching practices.

Critical thinking is a complex concept that combines both cognitive skills and personal dispositions. On the skills side, it includes abilities like reasoning, analysis, evaluation, and problem-solving (Ennis, 1985; Facione, 1990). On the personality side, it involves traits such as open-mindedness, inquisitiveness, and persistence (Hitchcock, 2017; Sternberg, 1986). Major theoretical frameworks by scholars like Ennis, Facione, Paul-Elder, and Halpern all emphasize this dual nature, though they approach it from different angles (Facione & Gittens, 2014; Paul & Elder, 2020). The key takeaway is that effective critical thinking requires not just the capability to think analytically but also the inclination and character to consistently apply these skills in decision-making and educational contexts (Halpern, 1998).

Creativity is the core ability of teachers to constantly innovate and solve problems in teaching, scientific research and management work. It is not only related to the professional growth of teachers, but also related to the innovation ability and academic atmosphere of the whole educational institution. The development of creativity is influenced by multiple factors, among which innovative self-efficacy is an important mediation mechanism. Innovation self-efficacy refers to the individual's confidence and belief in their success in innovation activities, which can affect the individual's motivation and behavior in the face of innovation challenges.

Creativity, defined as the ability to generate novel ideas, methods, and products, extends beyond innate talent to encompass interactions with external factors such as environment and culture. Creativity manifests in three forms: cultural, individual, and social. Cultural creativity reflects contributions to human civilization through advancements in science, art, and philosophy, while individual creativity focuses on personal abilities and expertise in specific fields. Social creativity emphasizes the role of societal systems and cultural dynamics in fostering innovation. Key factors influencing creativity include personal traits like critical thinking, curiosity, perseverance, and confidence; environmental conditions such as workplace and cultural settings; and broader cultural values and beliefs, which collectively shape an individual's creative potential (Amabile, 1996; Bandura, 1997). In the educational context, creativity is critical for teachers as they generate innovative approaches to teaching, research, and management. An essential



mediator in this process is innovative self-efficacy; defined by Bandura (1997) as the belief in one's ability to succeed in innovation; which enhances motivation and guides behavior in the face of challenges. Leadership, particularly transformational leadership, further influences creativity by inspiring and intellectually stimulating teachers, fostering their innovative confidence, and encouraging collaborative problem-solving. Transformational leaders employ dimensions like personalized care and idealized influence to cultivate innovation within teams, emphasizing the interplay between leadership and creativity in educational settings (Bass, 1985; Bass & Avolio, 1994; Gong, Huang, & Farh, 2009).

In local higher education institutions in Guangxi, China, teachers' creativity is particularly important for promoting educational innovation and improving the level of academic research. Local higher education institutions in Guangxi region of China undertake the dual task of cultivating high-quality talents and promoting scientific research. Therefore, the study of how critical thinking ability and leadership affect teachers' creativity, and how innovative self-efficacy plays an intermediary role in this process are of important theoretical and practical significance for the development of local higher education institutions in Guangxi and even the whole higher education in Guangxi.

The importance of this study stems from the critical role of teachers' creativity in driving educational innovation and advancing academic research, particularly in Guangxi, China, where higher education institutions are responsible for cultivating high-quality talent and fostering technological innovation. Understanding and improving these relationships requires investigating how critical thinking and leadership affect teacher creativity. Furthermore, innovative self-efficacy represents an important mediating role in this relationship, providing practical insights into encouraging motivation and innovative behaviors among educators. This study fills key theoretical and practical gaps by investigating how these factors interact in Guangxi's distinct cultural and institutional contexts, consequently providing a framework for improving teacher development and contributing to the creation of adaptive teaching approaches in the area.

Research Objective

This research aims to study the influence in depth how critical thinking skill and leadership promote on creativity of teacher.



Research Methodology

This study utilizes a documentary research approach to analyze the factors to influence based on critical thinking skill and leadership to creativity of teacher.

Defining the Research Focus. The first stage of this documentary research process is to identify a distinct and well-defined study focus. This is to investigate how critical thinking abilities and leadership influence teacher creativity in the educational context of Guangxi, China. The key objectives include: 1) Identifying Core Components: pinpointing critical thinking elements consist of reflective judgment, analytical skill, and problem-solving abilities that contribute to enhancing creativity in educators. 2) Exploring Leadership Dimensions: investigating transformational leadership aspects, including intellectual stimulation, personalized guidance, and idealized influence, that support the development of teacher creativity. 3) Understanding Mediating Factors: examining innovative self-efficacy as a mediator that links critical thinking and leadership to creativity. And 4) Contextualizing the Study: Placing the findings within the cultural and institutional framework of Guangxi's education system, addressing the region-specific factors that influence teacher creativity.

Document Analysis. Document analysis, a main method in documentary research, involves systematically reviewing and synthesizing relevant texts to address the research objective. The stages of document analysis are as follows: 1) Identifying Relevant Documents; compile a comprehensive collection of academic literature, government reports, policy documents, book, and institutional records that pertain to critical thinking, leadership, and creativity in education. Focus on sources that explore theoretical foundations, including Dewey's reflective thinking, Bandura's innovative self-efficacy, and transformational leadership models by Bass. 2) Screening and Categorization; categorize documents into thematic areas to ensure systematic analysis: 2.1) Critical Thinking: reflective judgment, analytical skills, and problem-solving abilities. 2.2) Leadership: transformational leadership dimensions include intellectual stimulation, idealized influence, and personalized support. And 2.3) Creativity: factors like personal traits, environmental influences, and cultural settings. And exclude irrelevant or duplicate materials to streamline the analysis. 3) Thematic Content Analysis; extract critical insights and recurring themes from the selected documents, focusing on how critical thinking and leadership contribute to creativity. Identify patterns, contradictions, and knowledge gaps in the existing literature to



provide a nuanced understanding of the research topic. 4) Synthesis of Findings; integrate insights from diverse sources to construct a cohesive framework that explains the relationships between critical thinking, leadership, and creativity. Assess how innovative self-efficacy mediates these relationships, emphasizing its role in enhancing teacher creativity. 5) Contextual Evaluation; analyze findings in the context of Guangxi's cultural and institutional landscape. Explore how regional policies, cultural norms, and educational practices influence the application of critical thinking and leadership to teacher creativity. 6) Validation and Interpretation; cross-check synthesized findings with established theories and frameworks to ensure reliability and consistency. Derive actionable insights that can inform teacher development programs, emphasizing critical thinking and leadership training as tools for fostering creativity.

Results

The findings of this study demonstrate the importance of critical thinking and transformational leadership in promoting teacher creativity in Guangxi, China. Each element is detailed in depth below, demonstrating how these elements interact to produce innovative teaching approaches.

Critical Thinking Components

- 1) Reflective Judgment is identified as a key element of critical thinking that empowers teachers to critically analyze existing practices, question assumptions, and evaluate alternatives. This ability allows teachers to navigate complex educational challenges by assessing the validity and reliability of information. In the Guangxi context, reflective judgment encourages educators to adapt their teaching methodologies to align with local cultural and institutional needs, thereby fostering creativity.
- 2) Analytical Skills enable teachers to deconstruct problems, identify patterns, and synthesize information to develop innovative solutions. This skill set is essential for curriculum design, classroom management, and pedagogical innovation. Teachers with strong analytical skills can effectively integrate evidence-based practices into their teaching, ensuring their creative outputs are both practical and impactful.
- **3) Problem-Solving Abilities**, problem-solving is the practical application of critical thinking, allowing teachers to devise novel strategies to address classroom and institutional



challenges. This component of critical thinking is particularly relevant in Guangxi, where teachers face unique regional challenges. By applying structured problem-solving processes, educators can develop adaptive teaching methods that enhance student learning and engagement.

Transformational Leadership as a Vital Enabler

- 1) Intellectual Motivation, transformational leaders inspire teachers by articulating a compelling vision and fostering a sense of purpose. Intellectual motivation encourages educators to challenge traditional norms and explore innovative teaching practices. In Guangxi, leaders who provide intellectual stimulation help teachers cultivate creativity by introducing them to new perspectives and pedagogical approaches.
- **2) Personalized Guidance** involves leaders providing tailored support to meet the individual needs of teachers. This includes mentoring, providing constructive feedback, and recognizing individual contributions. Such support creates a sense of trust and confidence, enabling teachers to experiment with creative ideas without fear of failure.
- 3) Collaborative Setting, a collaborative environment fostered by transformational leaders facilitates the sharing of ideas and collective problem-solving among teachers. In Guangxi, this collaboration is critical for overcoming regional educational challenges. Leaders who promote teamwork and mutual respect help build a culture of innovation, where creativity thrives.

Moreover, innovative self-efficacy, defined as the belief in one's ability to succeed in creative endeavors, acts as a bridge between critical thinking, leadership, and creativity. Teachers with high self-efficacy are more likely to take risks, persist in the face of challenges, and implement innovative solutions. The findings indicate that transformational leadership significantly enhances teachers' self-efficacy by fostering a supportive and motivating environment. Similarly, the application of critical thinking skills reinforces teachers' confidence in their creative capabilities.

The cultural and institutional environment of Guangxi influences the application of critical thinking and leadership in promoting creativity. Local educational policies, cultural values, and institutional frameworks shape how teachers engage with critical thinking and respond to leadership. For example, the emphasis on collaborative and community-oriented values in Guangxi aligns with the principles of transformational leadership, creating fertile ground for creativity to flourish.



Discussion and Conclusion

This study emphasizes the importance of critical thinking, transformational leadership, and innovative self-efficacy in cultivating teacher creativity in the distinct cultural and institutional environment of Guangxi, China. The findings are consistent with prior study results emphasizing the multidimensional character of critical thinking and its role in problem solving and innovation in education (Facione & Gittens, 2014). Reflective judgment, analytical skills, and problem-solving abilities provide the cognitive foundation that allows instructors to analyze, adapt, and innovate in response to educational obstacles. This is consistent with Dewey's (1933) premise that reflective thinking promotes systematic and judicious problem-solving processes, which are essential for effective education.

Transformational leadership has been highlighted as an essential catalyst of teacher creativity, promoting intellectual stimulation, customized mentoring, and a collaborative environment that encourages invention. These results support Bass and Avolio's (1994) transformational leadership approach, which emphasizes the importance of intellectual motivation and customized care in inspiring and empowering educators. Leadership not only motivates others, but it also influences the cultural and institutional environment, fostering creativity (Bass, 1985). In Guangxi, this kind of leadership is strongly aligned with local values that emphasize teamwork and community-oriented education.

Innovative self-efficacy is revealed as a vital mediator, bridging critical thinking, leadership, and creativity. Bandura's (1997) theory of self-efficacy posits that confidence in one's ability to innovate enhances motivation and persistence, findings echoed in this study. Teachers who possess strong innovative self-efficacy are more likely to engage in creative problem-solving, take calculated risks, and implement novel solutions in their classrooms. Transformational leadership further amplifies this effect by creating an environment where educators feel supported and valued. The study also highlights the influence of Guangxi's cultural and institutional context on these dynamics. Local educational policies and cultural norms significantly shape the interaction between critical thinking, leadership, and creativity. For example, the emphasis on teamwork and respect for hierarchical leadership in Guangxi aligns with transformational leadership principles, fostering a conducive environment for educational innovation. This finding



underscores the importance of tailoring teacher development programs to regional contexts to maximize their impact.

In conclusion, this study indicates that critical thinking and transformational leadership are vital for increasing teacher creativity, with inventive self-efficacy serving as a key mediator. These findings add to the existing research on educational innovation by offering a regional perspective that emphasizes the need of contextualizing teacher development practices. Guangxi educational institutions may cultivate an innovative and adaptable culture by including critical thinking and leadership training into professional growth programs, thereby improving teaching and research quality.

Suggestions

1. Multidisciplinary Research on the Impacts of Critical Thinking and Leadership. Future research could use longitudinal designs to examine the long-term benefits of critical thinking and leadership training on teacher creativity. By following instructors over time, researchers may examine how these elements grow and interact with innovative self-efficacy to shape long-term creative skills. Such studies would provide useful insights into the long-term impact of professional development efforts, as well as their influence on teaching methods, institutional innovation, and student outcomes.

2. Comparative Analysis of Diverse Educational Contexts. Expanding the scope of study to include comparative studies across regions and educational levels would help researchers better understand how varied cultural and institutional contexts influence critical thinking, leadership, and creativity. In this regard, examining the dynamics in rural versus urban schools or primary versus secondary education settings could highlight context-specific difficulties and opportunities, providing tailored solutions for enhancing teacher creativity in varied circumstances.

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The Relationship between UTAUT Factors and Trust in Artificial Intelligence System

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Abstract

Artificial intelligence is being more widely used in education. This study explores the relationship between Unified Theory of Acceptance and Use of Technology (UTAUT) factors and trust in AI systems within the context of higher education management systems (HEMS). The study utilizes a documentary research approach, analyzing existing theoretical frameworks, previous studies, and academic literature to establish connections between UTAUT factors including performance expectancy, effort expectancy, social influence, and facilitating conditions and users' trust in AI-driven technologies. The documentary analysis focuses on synthesizing insights from scholarly sources to understand how these factors influence students' acceptance and trust in AI-enhanced systems, specifically in the context of academic certificate authentication processes. The study highlights how performance expectations and perceived benefits of AI systems contribute significantly to building trust and driving adoption. The findings suggest that AI systems capable of delivering personalized and efficient services foster stronger trust among users, ultimately enhancing their willingness to adopt these technologies. This research underscores the value of integrating documentary evidence to inform technology adoption strategies and support decision-making processes in higher education institutions. The study also identifies gaps in existing literature and provides recommendations for future research on AI adoption and trust in educational technology systems.

Keyword: UTAUT, Artificial Intelligence, Trust, Higher Education, Technology Acceptance



Introduction

The advent of OpenAI in 2023 has precipitated a profound transformation in the manner by which individuals live and learn, largely as a consequence of the accelerated development of information technology. In this context, major universities are also proactively encouraging the utilisation of digital applications, with the objective of facilitating the integration of more sophisticated AI technology. One particularly pertinent issue that warrants further consideration is the potential use of AI enhancement technology to address the problem of graduates uploading images of academic qualifications certification. In the context of the current situation, it can be observed that traditional management models continue to exert a dominant influence in the majority of university settings. These traditional methods demonstrate the disadvantage of inefficiency when dealing with large amounts of image data, and are prone to errors and delays. As a result, it is challenging to meet the growing demand for real-time and accurate data in modern colleges and universities, particularly in regard to the academic qualification system. Nevertheless, the contemporary college student, as a technological trailblazer, has exhibited an extraordinary aptitude for utilising mobile devices to accomplish academic objectives. They possess considerable aptitude for learning and adaptation to technological systems. As a consequence of their upbringing in the digital age, this generation of students evinces a natural affinity and keen insight into new technologies. They are able to rapidly acquire proficiency in new technological tools and deploy them in a versatile manner across the full spectrum of learning and life activities. It is therefore of great practical significance to give full consideration to the acceptance hospitals of college students and introduce innovative AI enhancement technologies when exploring how to optimise the processing of college degree authentication images. The Unified Theory of Acceptance and Use of Technology (UTAUT) has emerged as a comprehensive framework for understanding technology acceptance across various domains, including education. The UTAUT model integrates multiple theoretical perspectives, including the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), and Technology-Organization-Environment (TOE) framework, to provide a holistic view of technology adoption and usage (Luhamya et al., 2017). Research has shown that the UTAUT model is one of the most extensively studied and widely applied theories in the context of understanding why individuals accept new technologies (Kala & Chaubey, 2023).



In educational technology acceptance research, the UTAUT model has demonstrated its versatility and applicability. Or & Chapman (2021) emphasized the reliability and robustness of the UTAUT model in explaining technology acceptance and use across various educational settings. Numerous studies have utilized the UTAUT model to investigate factors influencing technology adoption in education. For instance, Abu-Al-Aish & Love (2013) employed the UTAUT model to study factors affecting students' acceptance of mobile learning (m-learning) in higher education. Chen et al. (2021) explored factors influencing college students' continuous intention to use online course platforms. These studies highlight the UTAUT model's instrumental role in identifying key factors that influence students' intentions to use online platforms and digital learning environments (Li & Zhao, 2021).

The adaptability and extensibility of the UTAUT model make it a powerful tool for studying educational technology acceptance. Researchers have applied the UTAUT model to analyze the acceptance of e-learning systems, mobile learning applications, and digital learning environments in diverse cultural and professional settings (Mokoena et al., 2018). VanDerSchaaf et al. (2023) discussed factors influencing student information technology adoption, emphasizing the UTAUT model's synthesis of multiple acceptance models. Furthermore, Or & Chapman (2022) developed an instrument to measure online assessment acceptance in higher education based on the UTAUT model, further demonstrating its applicability in educational technology research.

The Technology Acceptance Model (TAM) has been a foundational framework in understanding individuals' acceptance and use of technology, particularly relevant to the adoption of AI-enhanced image processing in university student management. Developed in the mid-eighties, TAM focuses on users' behavioral intention and attitude, primarily through perceived usefulness and perceived ease-of-use (Chakraborty et al., 2021; Saadé, 2003). These core constructs provide valuable insights into users' intentions and behaviors, making TAM a cornerstone in research on technology adoption and usage across various sectors, including education. In the context of educational technology, TAM has been widely applied to investigate technology acceptance among students and educators. This application is particularly relevant to understanding how university students might accept AI-enhanced image processing systems for student management. For instance, Sabri et al. (2023) integrated TAM into research on the



acceptance of online learning platforms in higher education, highlighting its significance in understanding students' perceptions and behaviors. Similarly, Siripipatthanakul et al. (2022) utilized TAM to predict the intention to use smart education technology during the COVID-19 pandemic among higher education students in Thailand, showcasing the model's applicability in diverse educational contexts.

The relationship between UTAUT factors (performance expectation, effort expectance, social influence, facilitation conditions) and trust in AI system.

Performance expectations and their impact on user perceptions are key components of technology acceptance theories, particularly UTAUT and TAM (TAM) (Davis, 1989; Venkatesh et al., 2003). Performance expectations are defined as an individual's perception of the extent to which the use of a particular technology will help him or her improve job performance or efficiency (Venkatesh et al., 2003). It reflects users' expectations that the technology fulfills its intended purpose effectively, enhancing their productivity and outcomes. In the case of AIenhanced image processing in higher education management systems, such as the WeChat Mobile Image Capture 'Graduation Photo' mini program, performance expectancy are reflected in the degree of progress students believe using the system will bring in terms of submitting photographs for registration of their academic certificates. In traditional image processing, students often need to spend a lot of time and effort adjusting the format, size and quality of their photos to meet registration requirements; however, with the introduction of an AI-enhanced image processing system, students expect to be able to complete their photo processing more conveniently and efficiently, resulting in a smoother registration process that saves them time and improves the quality of their photos. Trust is a second-order concept that encompasses an individual's confidence in an AI system's ability to perform specific functions in a consistent and efficient manner (Chang et al., 2018; Choubisa, 2024). Research has demonstrated a direct correlation between positive user perceptions of system effectiveness and efficiency and trust and willingness to adopt the technology (Cao et al., 2022). In a Higher Education Management System, the anticipation by students that an AI-enhanced image-processing system simplifies and improves the academic certificate submission process is likely to result in the development of stronger trust in the system. Furthermore, an individual's trust in AI may be enhanced by its capacity to provide personalized, adaptable learning experiences and even to facilitate cognitive enhancement (Han et



al., 2024; Yang & Xia, 2023). Students perceive AI technology to be beneficial not only in terms of completing specific tasks, but also in relation to their overall outcomes. Moreover, the positive impact of AI on institutional efficiency, including enhanced human resource management (Abiola et al., 2024) and optimized learning experiences (Nikonova et al., 2023), fosters the development of a more trusting and accepting environment. This is extending the utilization of AI for certificate submission. The TAM and the UTAUT provide a sound theoretical framework for understanding the influence of performance expectations on trust in technology, which posit that users' beliefs regarding the efficacy and utility of technology (i.e., performance expectations) directly influence their willingness to trust and adopt technology (Davis, 1989; Venkatesh et al., 2003). However, despite numerous studies confirming the prevalence of this relationship in general technology acceptance, there is still a gap in understanding this relationship for the specific application of AI-enhanced image processing in HEMS.

Zhu (2024) proposes the development of high-performance faculty management systems using IT service environments and cloud computing technology to optimize educational processes. Similarly, Chen, (2023) explores the digitalization of university education management through association rule mining algorithms to enhance decision-making processes and improve management efficiency. These studies indicate the potential for applying advanced technologies, potentially including AI-enhanced image processing, in educational management.

Hence, this research is vital due to the increasing integration of AI technologies in educational environments, particularly in higher education management systems. As institutions implement AI-driven solutions for critical tasks like certificate authentication, understanding how UTAUT factors influence user trust becomes crucial for successful adoption and implementation. While AI systems offer significant potential benefits, their effectiveness depends heavily on user acceptance and trust. The current academic literature lacks comprehensive studies examining the relationship between UTAUT factors and trust in AI systems within educational contexts. By investigating how performance expectancy, effort expectancy, social influence, and facilitating conditions affect trust in AI technologies, this research aims to provide valuable insights that will help educational institutions develop more effective implementation strategies, enhance user acceptance, and optimize their AI-driven solutions, ultimately contributing to the successful digital transformation of higher education institutions.



Research Objective

To analyze the relationship between UTAUT factors and trust in AI-enhanced image technology application within Higher Education Management Systems.

Research Methodology

This study employed a documentary research approach to analyze the relationship between UTAUT factors and trust in AI-driven technologies within higher education management systems (HEMS). The research process involved multiple systematic steps:

Defining Research Focus: The study focused on essential UTAUT characteristics such as performance expectancy, effort expectancy, social influence, and enabling conditions, as well as how they affect trust in AI systems. Special emphasis was placed on AI-enhanced academic certificate authentication processes in HEMS.

Identifying and Gathering Sources: Identifying and Gathering Sources: Academic databases such as Scopus, Web of Science, and Google Scholar were thoroughly searched. Relevant theoretical frameworks, empirical studies, and industry reports about UTAUT and AI adoption in education were gathered. The inclusion criteria verified that sources were peer-reviewed, published within the last decade, and closely connected to the themes under inquiry.

Data Evaluation: The collected materials were thoroughly examined for relevancy, credibility, and quality. Priority was given to sources that empirically validated the links between UTAUT characteristics and technology trust, particularly in educational settings.

Thematic Analysis: A qualitative thematic analysis was carried out to uncover patterns and correlations between UTAUT characteristics and trust in AI systems. Key concepts, such as usability, social endorsement, and infrastructure support, were combined to provide a more complete knowledge of their interconnection.

Contextual Interpretation: The insights were contextualized within the higher education management framework, taking into account specific institutional constraints such as data security, user diversity, and administrative efficiency. The investigation underlined how these characteristics relate to the adoption of AI-driven technology.



Validation of Findings: Cross-referencing findings from several sources increased the reliability and consistency of the conclusions. Expert feedback on AI and educational technologies increased the study's validity.

This analytical approach allowed for a thorough assessment of current research to demonstrate unambiguous links between UTAUT variables and trust in AI technology, resulting in practical insights for educational institutions looking to employ AI-powered solutions.

Results

The findings highlight that AI systems capable of providing personalized and efficient services build user trust, increasing their desire to adopt these technologies as following factor: 1) Performance Expectation and Trust; performance expectation emerged as a pivotal factor in influencing trust in AI systems within the context of higher education management. Users have high expectations of AI-enhanced systems, particularly in tasks such as academic certificate authentication, where accuracy, efficiency, and reliability are paramount. When these systems consistently meet or exceed performance benchmarks, users develop a stronger sense of trust in their capabilities. For example, studies revealed that AI systems capable of minimizing fraud and streamlining administrative processes significantly increased users' confidence. Davis et al., 2020; Kim & Lim, (2022) highlighted those systems demonstrating high performance in reducing fraud and expediting administrative tasks garnered greater user trust. This trust is reinforced when systems demonstrate the ability to deliver predictive analytics, error reduction, and high-quality personalized experiences, emphasizing the importance of performance as a cornerstone of AI adoption. 2) Determination Expectation and Trust discuss that effort expectation plays a crucial role in determining users' trust in AI technologies. Trust is built when AI systems are perceived as easy to use, with intuitive interfaces and minimal technical complexity. Venkatesh et al., (2021) indicated that intuitive interfaces and seamless user experiences reduce skepticism toward AIdriven systems. Systems that reduce the learning curve for users alleviate anxiety and foster confidence, making them more likely to trust and adopt the technology. For instance, research findings showed that students and administrators were more willing to engage with AI systems that featured user-friendly designs and seamless functionality. By removing barriers to usability, these systems not only gain trust but also broaden their acceptance among diverse user groups,



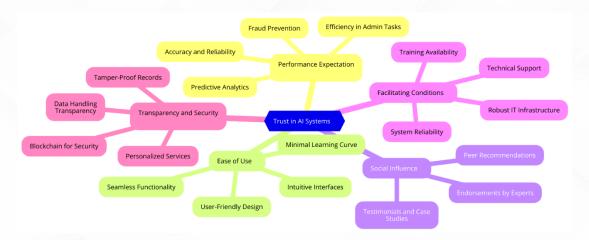
demonstrating the essential link between ease of use and trust. 3) Social Influence and Trust, this factor is cannot deny because social influence significantly affects how users perceive and trust AI systems. In higher education settings, trust often develops through the validation and recommendations of peers, faculty members, or institutional endorsements. For instance, when respected educators or IT staff advocate for the reliability and benefits of an AI system, users are more inclined to trust and adopt it. Additionally, testimonials and case studies from other trusted institutions further reinforce positive perceptions of the technology. This demonstrates that trust is not only built through the system's technical capabilities but also through the social context in which it is introduced and supported this related to Chen & Zhang, (2021) found that trust in AI systems grows when respected figures (e.g., professors, IT staff) validate their reliability. Social proof in the form of testimonials or case studies further reinforced positive perceptions. 4) Facilitating Conditions and Trust, Smith et al., (2023) highlighted that the availability of responsive technical support teams enhanced user trust in AI systems such as the availability of technical support, infrastructure, and training, are critical in fostering trust in AI systems. Users need to feel assured that institutional support exists to address potential issues or challenges they may encounter. Studies indicated that trust in AI systems is significantly higher when robust IT infrastructure and responsive technical support teams are in place. For example, the reliability of a certificate authentication system is enhanced when users know they can access prompt assistance and that the system is protected against technical failures. These facilitating conditions ensure that trust is not undermined by preventable disruptions, creating a solid foundation for AI adoption. 5) Users' Trust in AI-Driven Technologies; trust in AI systems is ultimately shaped by the ability of these technologies to deliver personalized, accurate, and efficient services while maintaining transparency and data security. For example, AI-based academic certificate authentication systems that incorporate blockchain technology instill trust through tamper-proof records and secure processes. Transparency in AI operations, where users understand how the system works and how their data is handled, further strengthens trust. By addressing users' needs for security, efficiency, and personalization, these systems encourage not only trust but also long-term adoption, underscoring their potential to revolutionize higher education management such as AI-based academic certificate authentication systems employing blockchain technology to ensure tamperproof certificates increased user trust due to the perceived security and transparency.



The research highlights that trust in AI systems within higher education management is influenced by several key factors. Performance expectancy is crucial, as users trust systems that consistently deliver accuracy, efficiency, and reliability, particularly in tasks like fraud prevention and certificate authentication. Effort expectancy also plays a significant role, with intuitive and user-friendly designs fostering confidence and reducing skepticism. Social influence is another critical factor, as endorsements from trusted figures, such as faculty or IT staff, increase users' trust in AI technologies. Facilitating conditions, including robust technical support, infrastructure, and training, further enhance trust by assuring users of reliable assistance. Lastly, users' trust is strengthened by personalized, efficient services that maintain transparency and data security, such as blockchain-enabled authentication systems. Together, these factors underline the importance of trust in driving the adoption of AI technologies in higher education following figure 1.

Figure 1

The Relationship Trust in Artificial Intelligence System



Discussion and Conclusion

The findings from this study emphasize the multifaceted nature of trust in AI systems within higher education management. Performance expectancy emerged as a cornerstone, with accuracy, efficiency, and reliability being critical to building trust, particularly in tasks like fraud prevention and certificate authentication (Davis, 1989; Kim & Lim, 2022). AI systems demonstrating high performance, such as the ability to minimize errors and streamline administrative processes, were found to significantly increase user confidence (Venkatesh et al., 2003). Moreover, effort expectancy plays a vital role, as intuitive and user-friendly designs



alleviate skepticism and enhance adoption (Venkatesh et al., 2021). Systems with seamless functionality and minimal learning curves help users engage with technology more effectively, fostering greater trust and confidence (Smith et al., 2023). The influence of social factors, including endorsements by faculty and institutional advocacy, further highlights the importance of community and peer validation in shaping user perceptions (Chen & Zhang, 2021). These findings reveal the interconnectivity of technical performance, usability, and social validation in cultivating trust in AI technologies. This research underscores that trust is essential for the successful adoption of AI systems in higher education. Facilitating conditions, such as robust infrastructure, responsive technical support, and adequate training, provide users with assurance and reliability, further reinforcing trust (Smith et al., 2023; Qin & Wang, 2020). Additionally, transparency and security, achieved through technologies like blockchain, bolster trust by ensuring data integrity and tamper-proof processes (Kim & Lim, 2022). Personalized services that address users' specific needs further strengthen trust and drive long-term adoption of these technologies (Jaiswal & Arun, 2021). These insights demonstrate the critical need for higher education institutions to adopt a holistic approach to implementing AI systems, addressing technical, social, and operational aspects to build and sustain trust. Future research should explore the evolving nature of trust over time as users gain familiarity with AI technologies, as well as investigate cultural and ethical dimensions of trust-building in diverse educational settings (Choi et al., 2023; Silander & Stigmar, 2019).

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Components of Innovative Leadership for School Administrators in Vocational Colleges

in Guangxi, China

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Abstract

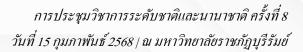
This study investigates the key components of innovative leadership for school administrators in vocational colleges in Guangxi, China. This employs a mixed-methodology approach, incorporating documentary analysis, in-depth interviews, surveys. The investigation addresses significant challenges faced by these institutions, including the alignment of educational outcomes with labor market demands, resource management, and technological integration. The findings highlight critical leadership components; encompassing strategic vision, change management capabilities, collaborative networking proficiency, and technological adaptability. The study concludes with recommendations for strengthening innovative leadership practices to enhance institutional performance, improve educational outcomes, and ensure the long-term competitiveness of vocational education in Guangxi, China which is emphasizing the crucial role of innovative leadership in navigating the complex challenges of 21st century educational administration.

Keyword: innovative leadership, vocational education, school administration, China education system



Introduction

Innovative leadership is an urgent need that school administrators must possess. From the importance and problems mentioned above, it can be seen that administrators with innovative leadership play a crucial role in creating educational innovations and building educational quality. This is to produce learners who can meet the needs of a constantly changing world and develop the country for competition. This is done by encouraging and promoting teachers and staff to create and use educational innovations, starting from school administrators to educational institutions. Vocational education plays a critical role in the socio-economic development of China, equipping students with practical skills and knowledge to meet the demands of a rapidly evolving labor market. In Guangxi, vocational colleges are pivotal in producing skilled professionals who contribute to regional and national economic growth. However, these institutions face significant challenges, including aligning curricula with labor market needs, managing limited resources, and integrating modern technologies into teaching and administration. Effective leadership among school administrators is essential to address these challenges and drive innovation within vocational education institutions. Innovative leadership, characterized by adaptability, vision, strategic thinking, and collaborative approaches, has become increasingly vital in the context of 21st century education. Leaders must navigate complex educational environments, foster industry partnerships, and inspire both educators and students to achieve excellence. Vocational education reform in China has advanced significantly, driven by principles of service orientation and employment focus. Numerous teaching innovations have been introduced, including radical changes in training methods, integration of learning and practice, school-industry collaboration, customized training programs, modular courses, flexible timetables, experimentation with credit systems, and an emphasis on ethics and career guidance. These measures have greatly accelerated the development of vocational education in China. In an era marked by rapid technological advancements, globalization, and evolving workforce demands, vocational education has become a critical driver of economic development and social stability. In China, vocational colleges play a vital role in producing skilled professionals who can meet the dynamic requirements of industries. The Guangxi, with its unique socio-economic landscape, faces both opportunities and challenges in vocational education management. Administrators in vocational colleges are at the forefront of driving institutional change, fostering innovation, and





ensuring the alignment of educational outcomes with labor market needs. However, the ability of these administrators to effectively lead innovation remains a key determinant of success. The increasing complexity of educational environments necessitates leadership that not only adapts to technological and societal changes but also inspires educators, students, and stakeholders toward shared goals. Even though ongoing reforms and investments in vocational education, challenges such as outdated leadership frameworks, inconsistent implementation of innovative practices, and resistance to change persist in many institutions. While some vocational colleges have achieved notable progress through partnerships with industries and curriculum modernization, the overall pace of transformation remains uneven. Innovative leadership is increasingly recognized as a critical factor in addressing these issues, yet research on its specific components within the vocational education sector in Guangxi remains limited. A deeper understanding of the key elements that constitute innovative leadership such as vision creation, technological adaptability, collaborative networking, and strategic change management can provide valuable insights for educational policy and practice. The rapid changes brought about by technological advancements, globalization, and societal transformation have placed increasing pressure on educational institutions to adapt and innovate. In Guangxi, China, vocational colleges play a crucial role in preparing skilled workers and professionals for the evolving labor market. However, the effectiveness of these institutions largely depends on the capabilities and vision of their administrators. The current landscape of vocational education in Guangxi reveals several critical challenges, including outdated leadership approaches, limited integration of innovative strategies, and insufficient emphasis on fostering sustainable organizational growth. Administrators in these institutions must navigate a complex environment characterized by shifting industry demands, budgetary constraints, and the need to cultivate a culture of continuous improvement. Addressing these challenges requires a focus on innovative leadership, which is essential for enhancing institutional performance, improving educational outcomes, and preparing students to meet the demands of a competitive global workforce. Despite the recognition of the importance of innovative leadership, there remains a significant gap in understanding its core components and their application within the context of vocational education in Guangxi. While some progress has been made in aligning curricula with labor market needs and modernizing educational practices, inconsistencies in leadership quality across institutions continue to hinder meaningful reform.



Additionally, administrators face challenges in integrating technological advancements, fostering collaborations with industry partners, and addressing cultural and organizational barriers to innovation. Therefore, a comprehensive study exploring the components of innovative leadership tailored to vocational colleges in Guangxi is urgently needed.

The reform of Chinese Vocational Education and Training in China from quantity to quality up to 2018, the number of Chinese vocational colleges (associate) amounts to 1418. In reality, Chinese modern vocational education and training have not only seen significant growth in numbers but have also reached a primary level of maturity, characterized by clear professional focus and systematic structure. This structure integrates secondary and higher vocational education and training. Unlike Western countries, where the concept of higher vocational education is less common, China often contrasts it with higher education, which is more academically oriented. However, these two educational paths are not hierarchically structured, with vocational education at the base and higher education at the top. This disparity reflects China's historical emphasis on academic education over vocational training. Nevertheless, vocational education and general education are distinct yet equally important, making vocational education rising from the long-term "level" At the national level, vocational education has started to be recognized on par with general education, taking on significant responsibilities in addressing social issues and supporting industrial development (Zhang, 2019). To ensure the effective implementation of this plan and uphold the legislative status of vocational education, the Ministry of Education is set to undertake revisions. "The Vocational Education Law of the People's Republic of China". In the draft revision of the law, the term "vocational higher education schools" is deliberately used to replace "higher vocational schools. This change signifies a shift in nature rather than just a change in name. For a long time, the direction of China's vocational education, particularly higher vocational education, has been unclear, with it often seen merely as a secondary option to general education. It makes vocational "associate students" being regarded as inferior to the "undergraduates" of general education by the society. The replacing "higher vocational school" with "vocational higher education school" intends to mean vocational higher Vocational education will be on par with traditional higher education. In the future, students pursuing vocational higher education will have the opportunity to advance beyond an associate degree and earn bachelor's and master's degrees. This represents a significant breakthrough in the



relationship between vocational education and general education, particularly in bridging vocational higher education with higher education. On the one hand, this represents the building of legislative status of vocational education; on the other hand, this means since then, vocational education can seek to explore its own theoretical framework or system and practical route instead of the past copy of higher education.

Yoki and Vanfleet (1998) Leadership is understood as a process that involves several key aspects: guiding the task objectives and strategies of a group or organization, motivating individuals to implement these strategies and achieve the goals, fostering group cohesion and identity, and shaping the organization's culture. According to Moshal (1998) the more common functions of leadership may be enumerated as under: 1) motivating members, 2) morale boosting, 3) support function, 4) satisfying needs of members, 5) accomplishing common goals, 6) representing members, 7) creating confidence 8) implementing change and resolving conflicts.

Innovative leadership, it's evident that successful leaders must integrate visionary thinking with adaptability, emotional intelligence, and inclusivity. They need to leverage technology, maintain high ethical standards, and focus on the development of their teams while being globally aware and sustainability-focused. Effective leadership today requires a multifaceted approach that addresses both immediate needs and long-term goals, adapting to the complexities of a rapidly changing world. Finally, this research aims to bridge this gap by identifying, analyzing, and proposing actionable frameworks for innovative leadership among vocational college administrators in Guangxi, ultimately contributing to the sustainable development and competitiveness of vocational education in the region.

Research Objective

To investigate components of innovative leadership for school administrators in vocational colleges in Guangxi, China.

Research Methodology

Documentary Research, the researcher studied related research, articles, reports, books, and other printed materials, as well as various forms of online media. And survey methods, participant observation, in-depth interviews, and questionnaires. Data is collected through in-depth



interviews with individuals involved teachers who work in Vocational Colleges in Guangxi, China.

Results

The findings of the study address to leadership components of innovative leadership for school administrators in vocational colleges consists of strategic vision, change management capabilities, collaborative networking proficiency, and technological adaptability.

In term of strategic vision, because of rapidly evolving business landscape, strategic vision has emerged as a cornerstone of effective leadership. This demonstrates that leaders who possess this quality can effectively map out their organization's future route while maintaining a clear understanding of current market dynamics and potential disruptions. They demonstrate an exceptional ability to see beyond immediate challenges and envision possibilities that others might miss, enabling them to position their organizations advantageously. Besides, leaders with strong strategic vision serve as organizational lighthouses, guiding their teams through uncertainty with clarity and purpose. This component indicates that these leaders surpass at translating abstract concepts into actionable plans, helping their teams understand not just what needs to be done, but why it matters. This ability to connect day-to-day operations with long-term objectives creates a more engaged and motivated workforce, as employees can see how their contributions fit into the bigger picture.

Change Management Capabilities, this finding underscores the critical importance of change management capabilities in modern leadership. Successful leaders in this field display a special capacity to guide their organizations through times of change while preserving operational stability and staff morale. They understand that change is not merely about implementing new processes or systems, but about guiding people through complex emotional and professional transitions. These leaders frequently demonstrate expertise in developing comprehensive change management frameworks that cover both technical and human aspects of transformation. This component reveals that successful change leaders excel at anticipating resistance, addressing concerns proactively, and creating support systems that help employees adapt to new ways of working. Their approach typically combines clear communication, empathy, and practical support, resulting in higher success rates for change initiatives and stronger organizational resilience.



Collaborative Networking Proficiency, the study highlights how collaborative networking has become increasingly vital in today's interconnected business environment. The leaders who demonstrate this capability show exceptional skill in building and maintaining relationships across various organizational boundaries, creating valuable connections that drive innovation and growth. They understand that success in modern business requires more than just internal excellence; it demands the ability to leverage relationships and partnerships effectively. These networking-proficient leaders excel at creating ecosystems of collaboration that extend far beyond traditional organizational boundaries. The research shows they are particularly adept at identifying strategic partnership opportunities, fostering cross-functional cooperation, and building trust-based relationships that withstand challenges and time. Their ability to connect different stakeholders and facilitate meaningful dialogue leads to more robust problem-solving capabilities and increased access to resources and opportunities.

Technological Adaptability, in examining technological adaptability, the study reveals that successful leaders demonstrate an impressive capacity to embrace and leverage technological advancement for organizational benefit. They stand out not only for their personal comfort with technology, but also for their ability to identify and implement technical solutions that add true value to their enterprises. They take a balanced approach, neither rushing to adopt every new fad or fighting vital technical development. Furthermore, technologically adaptable leaders excel at creating an organizational culture that embraces digital transformation while maintaining human connections. Their indicates that these leaders are particularly skilled at helping their teams navigate the intersection of technology and human interaction, ensuring that technological advancement serves to enhance rather than replace human capabilities. They have a unique ability to strategically appraise technical investments, making judgments that strike a balance between innovation, practicality, and organizational readiness.

Discussion and Conclusion

The findings of this study highlight the essential components of innovative leadership necessary for school administrators in vocational colleges in Guangxi, China. These components; strategic vision, change management capabilities, collaborative networking proficiency, and technological adaptability are integral to addressing the multifaceted challenges in the vocational



education sector. Strategic vision enables administrators to align institutional goals with evolving market demands, offering a roadmap for long-term success. Change management capabilities ensure smooth transitions during institutional reforms, balancing technical advancements with the human aspects of transformation. Collaborative networking proficiency emphasizes the importance of fostering partnerships both within and outside the organization to drive innovation and resource sharing. Technological adaptability underscores the need for administrators to embrace digital tools and integrate them seamlessly into educational and administrative practices. These findings underscore the significance of leadership that is not only visionary but also capable of navigating change, building networks, and leveraging technology to improve institutional outcomes and prepare students for a competitive global workforce.

In conclusion, innovative leadership emerges as a cornerstone for enhancing the quality and competitiveness of vocational education in Guangxi, China. Administrators equipped with strategic vision, change management skills, collaborative networking abilities, and technological adaptability can address the unique challenges facing vocational education institutions. These leadership components play a crucial role in aligning curricula with market needs, managing institutional resources efficiently, and fostering a culture of continuous improvement and innovation. The study highlights the urgent need for targeted leadership development programs and policy interventions to equip vocational school administrators with these essential skills. Future research can further explore how these components can be effectively implemented across diverse institutional settings to ensure sustainable and impactful leadership in vocational education.

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Needs and Expectations of Chinese Students studying in Thai Higher Education Institutions

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Abstract

This research investigates Chinese students' needs and expectations for studying at Thai higher education institutions, focusing on factors influencing their decision-making processes, academic experiences, and overall satisfaction. According to the rapid acceleration of globalization and increasing international student mobility and educational management strategies among Chinese students. Thailand has developed as a prominent destination for Chinese students tracking higher education. The research addresses the growing importance of international student recruitment as a strategic response to declining domestic enrollment rates and financial challenges faced by Thai universities. The key factors surveyed include affordable tuition fees, cultural proximity, bilingual programs, and strategic marketing initiatives to Chinese students. Data were collected through surveys and interviews with Chinese students currently enrolled in Thai universities. The findings reveal that academic quality, affordability, compatibility with existing culture, institutional reputation, and student supportive services significantly influence Chinese students' choices.

Keyword: Needs and Expectations, Educational Management Strategies, International Students,
Thai Higher Education



Introduction

The scenery of higher education has undertaken significant transformation in the 21st century, characterized by growing global competition, reduced government funding, and rising functioning costs. This change has been particularly pronounced in Thailand's higher education sector, whereas institutions face mounting challenges from declining domestic enrollment due to demographic changes and increased competition from international institutions. In response, Thai universities have strategically positioned themselves in the global education position, with a particular focus on attracting Chinese students, who represent the world's largest population of international students. Along with higher education in the new century faces increasing difficulties. The education sector has become more competitive due to decreased government support and rising student costs (Soutar & Turner, 2002). Globalization has further complicated this landscape, impacting higher education institutions in profound ways (Dodds, 2008). This phenomenon, which transcends national boundaries (Scott, 2000), intensifies competition among institutions and compels them to enhance or preserve national competitive advantages. As a result, higher education institutions are actively promoting global trends (Dodds, 2008) and contributing to the worldwide knowledge economy through research, student recruitment, and the establishment of branch schools (Joseph Sia Kee Ming, 2010). The transformation of universities into corporate entities, driven by globalization, has altered their organizational structures and ethos, allowing them to boost their global competitiveness (Rhoads & Rhoades, 2005). The education sector is now a lucrative industry, generating billions in revenue, even in affluent nations, and significantly impacting Chinese commerce (Cheong Cheng, Cheung & Yuen, 2011).

China's role in global higher education has expanded dramatically. As of 2017, China was the leading country in sending students abroad, with 544,500 Chinese students studying overseas (Xinhuawang, 2020). In particular, Chinese students increasingly favor Southeast Asia, spurred by initiatives such as the One Belt, One Road (Xinhuawang, 2020). Thailand has emerged as a popular destination for these students, with the number of Chinese students in Thailand rising from 6,468 in 2007 to 18,061 in 2016 (Sirivish, 2016). The Thai Ministry of Education reported that the number of Chinese students in Thailand surged to 31,000 by 2015 (Ministry of Education Thailand, 2020). This influx has helped Thailand become a major educational hub in ASEAN (Porter, 2008). The growing presence of Chinese students in Thailand's higher education system



reflects broader regional and economic trends. China's economic prosperity has enabled more middle-class families to pursue international education opportunities for their children, while Thailand's geographic proximity, cultural similarities, and relatively affordable education costs make it an attractive destination. Thai institutions have responded to this opportunity by adapting their educational management strategies, offering diverse programs in multiple languages, and enhancing their institutional infrastructure. This adaptation has contributed to a remarkable increase in Chinese student enrollment, with numbers rising from 6,468 in 2007 to approximately 31,000 by 2015, establishing Thailand as a significant educational hub within the ASEAN region.

Thailand's aging population and declining birth rates have led to a significant drop in domestic student enrollments. Thai universities face the risk of closures due to low intake and increased competition from foreign rivals (Bangkok Post, 2017). To counter this, Thailand is focusing on attracting more Chinese students, which not only addresses the enrollment decline but also stimulates economic growth and strengthens bilateral ties with China.

The Chinese market's demand for educational services has increased as families become wealthier and more focused on securing quality education for their children. Many Chinese families now have the financial capability to send their children abroad, driven by the belief that international education provides better opportunities (Joseph Sia Kee Ming, 2010). In response to these trends, Thai higher education institutions are adapting their strategies to attract Chinese students. The relatively low cost of education in Thailand, combined with cultural similarities and favorable living conditions, makes it an attractive option for Chinese students (Weekly Manager, 2016). Thai universities are updating their curricula and marketing strategies to cater to Chinese students, aiming to create competitive advantages in this growing market (Kulnaree Nukit Rangsan et al., 2021). To enhance their appeal to international students, particularly from China, Thai institutions are investing in educational management practices that focus on quality, innovation, and strategic planning (Saqib et al., 2020; Wan & Abdullah, 2021). Effective educational management policies, incorporating innovative methods and technology, are crucial for maintaining competitiveness and meeting the needs of international students (Soewarno & Tjahjadi, 2020; Dwaikat, 2021).



Thai universities are also exploring global cooperation opportunities to expand their reach and improve their offerings (Chenin Chen, 2014). By addressing the specific needs of Chinese students and improving the quality of education and support services, Thai institutions can build a stronger competitive edge in the international market (Alsheyad & Albalushi, 2020; Hauptman Komotar, 2020). As Thailand continues to adapt to these global educational trends, its focus on attracting and retaining Chinese students will be pivotal in shaping its higher education sector's future. The strategic development of educational management policies and the integration of technological innovations will play a critical role in enhancing Thailand's position as a leading educational destination in the region. Education management of Chinese students in Thailand, as global society evolves and countries strive for economic development, competition in human resource development has intensified (Hung, 2021). Countries, including China, are implementing policies to enhance their citizens' potential and adapt to societal and economic changes through both domestic and international education (Stokes, 2021). Since its economic reforms began in 1978, China's rapid economic growth has improved the quality of life, leading more middle-class Chinese families to send their children to study abroad (Jitpanu Phumchatmongkol & Adila Pongyeela, 2016).

Thai higher education institutions face significant challenges, including declining enrollment and financial difficulties (Yang & Thaima, 2021). To address these issues and attract international students, they have adopted the ISCED 2013 criteria and developed diverse academic programs, making Thailand an increasingly attractive destination for international education, particularly for Chinese students, who represent the largest group of international enrollees (Yang & Thaima, 2021). These institutions offer a wide range of undergraduate, master's, and doctoral programs tailored to Chinese students' needs, using approaches such as employing Chinese faculty, offering Chinese language instruction, or implementing bilingual programs (Kulnaree Nukit Rangsan et al., 2021). As of the 2020 academic year, Thailand had 571 higher education programs spanning fields such as business, arts, communication, law, engineering, science, and public administration (Office of the Permanent Secretary for Higher Education, Science, Research and Innovation, 2020). These programs are delivered in English, Thai, Chinese, and bilingual formats. Chinese students are enrolled in both private institutions like Krirk University and Kasem Bundit University, and public universities such as Chulalongkorn University and Chiang Mai



University, as well as open universities and Rajabhat Universities. The number of Chinese students continues to grow steadily (Higher Education Informatics Center, 2021). Both public and private institutions in Thailand have aligned their curricula with international standards, adhering to national education policies and employing qualified professionals to ensure quality assurance. These efforts aim to build trust among stakeholders and maintain Thailand's appeal as a preferred destination for Chinese students. In recent years, Thai institutions have created international programs, some taught entirely in Chinese, while others use English for instruction and dissertations. Each institution has adopted different management strategies to maximize student satisfaction, including providing excellent services and creating positive learning experiences. This approach helps foster student loyalty and enhances institutional competitiveness through word-of-mouth referrals.

Research Objective

To explore factors influencing Chinese students' decision to pursue higher education in Thailand.

Research Methodology

This study emphasizes on documentary research by studying related research, articles, reports, books, and other printed materials, as well as various forms of online media. Reliability of questionnaire brought a questionnaire that measures the accuracy of the content from qualified person and has been modified to try with project leader Education management of Chinese students in Thailand from institutions of higher education. Utilizing survey methods, participant observation, in-depth interviews, and questionnaires. Sampling, data collection via Chinese students' agencies 6 regions in Thailand, and specify the number of provinces in each region as follows. The northern region comprises 9 provinces, the central region includes 22 provinces, the northeastern region consists of 20 provinces, the eastern region contains 7 provinces, the western region has 5 provinces, and the southern region features 9 provinces. In total, there are 14 provinces. For quantitative research tool preparation, the researcher employed a questionnaire to gather data by surveying project leaders involved in managing the education of Chinese students in higher education institutions in Thailand.



Results

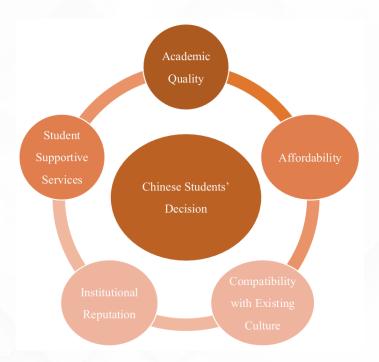
The research results specifically focused on the Needs and Expectations of Chinese Students studying in Thai Higher Education Institutions presented that Chinese students prefer to study in Thailand according to 1) Academic Quality Chinese students choose Thailand because: Thai universities increasingly offer internationally recognized programs, especially in fields like Business, Engineering, and Medicine. Many Thai institutions have partnerships with prestigious Chinese universities, offering dual degree opportunities and credit transfers. Thailand's investment in educational infrastructure provides modern learning facilities and research opportunities. The presence of qualified international faculty members, including Chinese professors, helps bridge any language or cultural gaps. Thai universities actively incorporate practical training and internship programs with leading companies, enhancing employment prospects. 2) Affordability, Chinese students find Thailand attractive due to: significantly lower tuition fees compared to Western countries or other popular Asian destinations like Singapore or Japan. Reasonable living costs, including accommodation, food, and transportation. Cost-effective study packages that often include accommodation and meal plans. Various scholarship opportunities specifically designed for Chinese students. The ability to maintain a good quality of life without excessive financial burden. Favorable exchange rates between Chinese Yuan and Thai Baht. 3) Compatibility with Existing Culture, Thailand appeals to Chinese students because: strong cultural similarities between Thai and Chinese societies reduce culture shock. Shared Asian values in education, respect for teachers, and community living. Familiar dietary habits and availability of Chinese cuisine. Buddhist cultural elements that resonate with Chinese traditional values. Geographic proximity allows for easier travel between Thailand and China. Large existing Chinese communities in Thailand provide support networks. 4) Institutional Reputation, Chinese students value Thai institutions because: many Thai universities rank well in Asian university rankings. Strong recognition of Thai degrees in China's job market. Established history of successful Chinese alumni from Thai universities. Growing reputation of specific programs, particularly in business and hospitality. Strategic partnerships between Thai and Chinese institutions boost credibility. Positive word-of-mouth recommendations from previous Chinese students. 5) Student Supportive Services Thailand attracts Chinese students through: dedicated international student offices with Chinese-speaking staff. Comprehensive orientation programs specifically designed



for Chinese students. Simplified visa processes and documentation assistance. Well-established support systems for housing and daily life adaptation. Special academic support including language assistance and tutoring. Mental health and wellness services that understand Chinese cultural perspectives. Career counseling services with connections to both Thai and Chinese job markets.

Figure 1

Key factors influencing Chinese students' decision to pursue higher education in Thailand.



The empirical evidence indicates that the decision-making process of Chinese students regarding tertiary education in Thailand is influenced by five interrelated variables. The primary determinant is identified as academic quality, which encompasses the perceived pedagogical standards and educational excellence maintained by Thai institutions, subsequently impacting students' anticipated academic and professional paths. The second critical variable pertains to financial accessibility, wherein tuition fees and associated living costs constitute significant considerations for prospective students and their families. Cultural congruence emerges as the third decisive factor, emphasizing the significance of sociocultural compatibility and environmental adaptation for international students. The fourth variable relates to institutional



reputation, with the academic standing and credibility of Thai higher education establishments serving as a substantial draw for Chinese students. The final determinant comprises comprehensive student support services, encompassing specialized resources and assistance mechanisms designed to facilitate international students' academic integration and overall experience. These five interconnected variables collectively clarify the motivating factors underlying Chinese students' selection of Thailand as their preferred destination for higher education searches.

Discussion and Conclusion

The findings emphasize five key dimensions: academic quality, affordability, cultural compatibility, institutional reputation, and student support services. These dimensions collectively shape Chinese students' perceptions and determine their overall satisfaction and success reasons while continuing education in Thailand.

- 1) Academic Quality stands out as a key factor attracting Chinese students to pursue higher education in Thailand. Thai universities have significantly improved their academic programs, particularly in Business, Engineering, and Medicine, making them more competitive internationally. Strong partnerships with Chinese universities offer dual degree programs and credit transfer opportunities, enhancing their appeal to Chinese students. Investments in modern facilities, such as advanced classrooms and research centers, have created an optimal learning environment. The presence of international educators, including Chinese professors, helps reduce cultural and language barriers, fostering inclusivity. Practical internship opportunities with reputable companies further enhance students' employment prospects. However, challenges remain, including inconsistencies in educational quality across institutions and limited research opportunities in some fields. To maintain high standards, Thailand must focus on consistent academic benchmarks and faculty development.
- 2) Affordability is another key factor influencing Chinese students' decision to study in Thailand. Compared to Western countries and other Asian destinations like Singapore and Japan, Thailand offers significantly lower tuition fees and daily living costs, including housing, meals, and transportation. Many Thai universities provide cost-effective, all-inclusive packages covering accommodation, meals, and access to facilities, making financial planning easier for students and



their families. Scholarships and financial aid specifically tailored for international students, including Chinese applicants, further reduce the financial burden. Additionally, the favorable currency exchange rate between China and Thailand offers extra financial advantages. However, universities must ensure transparency in their fee structures and make information about financial assistance easily accessible to build trust and avoid misunderstandings with prospective students.

- 3) Cultural compatibility significantly influences Chinese students' ability to adapt and succeed in Thailand. The geographical proximity between the two countries allows for convenient travel home, while shared Asian cultural values, such as respect for educators, communal living, and emphasis on academic achievement, create a familiar environment. The availability of Chinese cuisine and established Chinese communities further ease the adjustment process. Additionally, the shared Buddhist cultural influence fosters a sense of belonging. However, language barriers remain a challenge, particularly in academic and administrative contexts. To address this, universities should enhance bilingual services and introduce cultural awareness programs to facilitate smoother integration and reduce misunderstandings.
- 4) Institutional Reputation in Thailand is a significant factor for Chinese students when making enrollment decisions. Many Thai universities have achieved high rankings in regional academic assessments and are recognized for their excellence in specific disciplines such as hospitality, business management, and healthcare. Strategic partnerships between Thai and Chinese institutions have enhanced the credibility of degrees obtained from Thai universities. Programs offering dual degrees and international exchange opportunities are particularly attractive to Chinese students. Furthermore, universities with a history of successful Chinese alumni are viewed as reliable choices, contributing to positive word-of-mouth recommendations. However, maintaining and improving institutional reputation requires continuous investment in academic research, faculty development, and innovative curricula. Universities should also prioritize transparent communication about institutional achievements to build trust among prospective students and their families.
- 5) Student Support Services, effective student support services are essential for ensuring a positive experience for Chinese students studying in Thailand. Many Thai universities have established dedicated international student offices staffed with Chinese-speaking personnel, facilitating smooth communication and efficient administrative assistance. Tailored orientation



programs help Chinese students adapt quickly to both academic and social environments, while simplified visa processes and documentation support reduce bureaucratic stress during enrollment. Additionally, academic support services such as language assistance programs, tutoring, and career counseling address students' diverse academic needs. Increasingly, mental health and wellness services, designed with sensitivity to Chinese cultural perspectives, are being implemented to support emotional well-being. However, gaps remain in areas like extracurricular opportunities, academic mentorship, and internship placements. Continuous evaluation and improvement of these services are necessary to ensure a comprehensive support system for international students.

Suggestions

- 1) Comparative Analysis of International Student Experiences in Southeast Asia to conduct a comparative study of the experiences, needs, and expectations of Chinese students in Thailand versus other Southeast Asian countries such as Malaysia, Singapore, and Vietnam. And studying od validation of understanding the similarities and differences in factors influencing Chinese student satisfaction across regional higher education systems can provide insights for regional collaboration and policy harmonization.
- 2) Longitudinal Study on the Academic and Career Outcomes of Chinese Students in Thailand to investigate the long-term academic achievements, employability, and career paths of Chinese students after graduating from Thai higher education institutions. This is about tracking post-graduation outcomes can offer valuable feedback on the effectiveness of educational programs and support services, helping institutions refine their strategies for student success.
- 3) Exploring the Role of Technology and Digital Platforms in Enhancing Chinese Student Engagement focuses on assess the effectiveness of digital platforms, online services, and virtual learning environments in meeting the academic and social needs of Chinese students studying in Thailand with the increasing reliance on digital tools in education, understanding their impact on international student satisfaction and engagement is crucial for enhancing institutional competitiveness.



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Components of Structural Dimensions Informatization Leadership of Deans of Secondary Colleges of Higher Vocational Institutions in Guangxi Zhuang Autonomous Region

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Abstract

The integrated information technology (IT) leadership in higher vocational education is becoming increasingly significant in the modern educational scenery. This study explores the structural dimensions of informatization leadership among deans of secondary colleges within higher vocational institutions in Guangxi with the rapid integration of information technology into education, effective leadership in informatization has become a critical factor for institutional success. This research studies how the leader as the deans of secondary colleges leads their institutions through digital transformation. The findings reveal key leadership components, showing how leaders need to balance strategic thinking with hands-on technical knowledge while managing resources and guiding their teams through change of society. The study highlights the need for continuous professional development, resistant policy frameworks, and enhanced collaboration with external stakeholders to strengthen informatization leadership skills. These findings subsidize to a deeper comprehension of leadership structures in vocational education components of structural dimensions consist of organizational structure, staffing, and information technology infrastructure.

Keyword: Structural Dimensions, Leadership, Higher Vocational Institution, Integration of Information Technology



Introduction

In recent years, the rapid advancement of information technology (IT) and digital transformation has profoundly influenced educational systems globally, reshaping teaching, learning, and administrative processes. The integration of IT into education is no longer an option but a necessity for institutions to remain competitive and relevant. In China, higher vocational education holds a pivotal position in equipping students with practical skills to meet the demands of a rapidly changing labor market. According to the Ministry of Education's 2022 National Education Development Statistics Bulletin, the gross enrollment rate for higher vocational education reached 59.6%, indicating substantial progress in accessibility and inclusivity. However, challenges related to quality, efficiency, and the integration of technology persist, necessitating innovative solutions.

The concept of connotative development has gained prominence as a guiding principle for enhancing the quality of education. As articulated in the 19th Party Congress Report, the focus on quality improvement over scale expansion underscores the importance of fostering an education system that aligns with societal and economic needs. Within this framework, informatization—the application of IT to improve educational outcomes—emerges as a critical strategy. Deans of secondary colleges, serving as intermediaries between institutional leadership and operational staff, play a crucial role in implementing informatization initiatives. Their leadership is instrumental in aligning institutional objectives with technological advancements to achieve connotative development.

According to Burton Clark, a university is a "bottom-heavy" organization. The so-called "bottom-heavy" characteristic of universities mainly refers to the fact that the power of innovation and development of universities comes directly from the vitality of grass-roots organizations. Since the reform and opening up, China's higher education internal management system has undergone significant changes, typically characterized by the transformation from the original "school - department - teaching and research office" system to "school - secondary colleges - professional group teaching and learning" system. The typical feature is the change from the original "school - department - teaching and research office" system to "school - secondary colleges - professional group teaching team" system. This makes the college system return to the field of higher vocational education, and gradually become the most important and dynamic grass-



roots organization of higher vocational education. In this sense, the healthy development of colleges becomes the fundamental guarantee and sufficient power for the innovative development and stable operation of higher vocational education. In this case, the education informatization process of higher vocational colleges at the school level is bound to be decomposed into the education informatization process at the college level, and the informatization leadership of the president of higher vocational colleges is bound to be decentralized to the dean. According to this logic, the dean's informatization leadership becomes the guarantee to achieve the goal of higher vocational informatization construction, and also becomes the cornerstone and driving force of the informatization construction process of higher vocational colleges and universities.

The reform of the management system of higher vocational colleges and universities gives colleges and universities sufficient power and space to delegate the dean to deal with the healthy development of colleges and universities with the aim of dealing with the relationship with sister units, society and industry, which requires the dean to pay attention to dealing with the relationship with other units of the university, such as fighting for the funding of equipment from the Assets Division and other departments, communicating with the Modern Education Technology Centre for learning resource development, etc., so as to strive for the development space for the educational informatization of the college. It is also necessary to strengthen cooperation and win-win cooperation with social resources and industrial companies to provide technical assistance and partners for the development of educational informatization in colleges. The research that provides corroboration for this is that Wu Daguang et al. found in their survey of online teaching during the epidemic that the 97 colleges and universities surveyed at the time used a total of 66 online teaching platforms, such as Superstar, Nail, Tencent Conference, etc., of which 11 types of government platforms for colleges and universities accounted for 17 per cent, and a total of 55 types of market-based platforms accounted for 83 per cent. This shows from one side that it is very necessary and important for the dean's information leadership to coordinate and deal with the relationship between the college and the internal and external units, and to strive for the necessary development resources and space.

The Guangxi Zhuang Autonomous Region presents a unique context for studying informatization leadership in higher vocational education. Characterized by its diverse cultural and economic landscape, Guangxi faces distinct challenges in aligning regional development with



national education modernization goals. The informatization of higher vocational institutions in Guangxi is essential not only for regional competitiveness but also for contributing to China's broader vision of becoming a global leader in education and technology. Despite the policy emphasis on education informatization, significant gaps remain in the actual implementation and execution of IT-driven strategies at the secondary college level. The initial dilemma is unconsciousness. In the face of the rapid advancements in artificial intelligence, big data, learning analytics, support, and other emerging technologies, some college administrators and deans still lack the ability to adapt to change. They fail to recognize that these new technologies differ from the original traditional technologies not only in their technical mechanisms, but also in the fact that they have already revolutionized higher education. Furthermore, they fail to recognize that the dean must improve and apply their own information technology leadership in professional construction, talent training, and other areas to reflect their proper role and value. The role of deans in facilitating this transition cannot be overstated. Effective informatization leadership involves not only technical proficiency but also strategic vision, resource management, and stakeholder engagement. Deans are tasked with navigating a complex landscape of competing priorities, limited resources, and resistance to change. Their ability to lead informatization efforts directly impacts the quality of education and the preparedness of students for the digital economy.

Previous studies have highlighted the transformative potential of IT in education, noting its ability to enhance learning outcomes, improve administrative efficiency, and foster innovation. However, the successful implementation of IT-driven strategies requires strong leadership at all levels of the institution. This study builds on existing literature by focusing specifically on the role of deans in secondary colleges, addressing a critical gap in the research. By examining the components, challenges, and opportunities of informatization leadership, this study contributes to the growing set of knowledge on educational leadership in the digital age.

The finding of this research is Structural Dimensions to discuss the components of which include organizational structure, staffing, and information and technology infrastructure. Structural dimensions can be quantified in terms of the complexity of the organizational structure, the completeness of the information and technology infrastructure. 1) Organizational Structure considers the complexity of the organizational structure and how it supports or hinders informatization leadership. It examines how the hierarchy, workflows, and departmental



coordination facilitate information sharing, information technology project implementation, and alignment with institutional goals. A transparent and well-defined organizational structure is crucial to ensure that decision-making processes are not hindered by bureaucratic delays. 2) Staffing relates to the quality and expertise of personnel involved in informatization leadership. Deans must ensure that staff have sufficient digital literacy, technical proficiency, and a clear understanding of the integration of information technology in curriculum and administration. Training programs and continuous professional development are vital to keeping staff updated with the latest technological advancements and 3) Information Technology Infrastructure is evaluated based on its completeness and readiness to support informatization goals. This includes hardware, software platforms, and network reliability. Institutions must ensure sustainable investment in information technology infrastructure to prevent obsolescence and system failures.

Thus, identifying effective strategies for enhancing informatization leadership and provide actionable recommendations for empowering deans and driving the digital transformation of higher vocational education in Guangxi and beyond. Through a detailed analysis of the current state of informatization leadership and the development of a targeted enhancement model, this research seeks to advance the connotative development of higher vocational education, ensuring its alignment with national and global trends. Each dimension represents a critical aspect of successful informatization leadership, highlighting key focus areas for effective implementation and sustainability.

Objective

To identify the key components of informatization leadership as Structural Dimensions for deans in secondary colleges of higher vocational institutions in Guangxi.

Research Methodology

The study adopts a mixed-methods approach, combining qualitative and quantitative research methodologies to ensure a comprehensive analysis.

Data Collection: For this study, documentary research for qualitative data were gathered through semi-structured interviews with deans and administrative staff. Quantitative data were obtained via surveys targeting faculty and students, focusing on their perceptions of information technology



leadership effectiveness. The evaluation forms containing these elements were sent and the validity of the elements and indicators was verified by five experts through the Item-Objective Coherence Index (IOC). Qualitative data were analyzed using thematic coding to identify recurring patterns and insights. In order to collect data for the study by document study. The researcher obtained all the interview data within two weeks. Data processing and analysis to verify the reliability and validity of the data according to the variables studied. Interview outlines were assessed using the IOC (Index of Objective Coherence of the project), which was used to determine the content validity of the interview outlines.

Results

The result of this study was the key components of structural dimensions include organizational structure, staffing and information technology infrastructure. 1) Organizational Structure; the effectiveness of informatization leadership heavily relies on a well-defined organizational structure that ensures seamless coordination across departments. An overly bureaucratic structure can slow down decision-making and delay information technology project implementation. Structures that encourage collaboration across administrative and academic units are more successful in fostering innovation. There are crucial aspects for organizational structure. Clear hierarchies: roles and responsibilities must be transparent. Decentralized Decision-Making: empower middle-level leaders, such as deans, to make IT-related decisions efficiently and cross-department collaboration: foster an ecosystem where IT staff, faculty, and administrators work together.

Without a streamlined and transparent organizational structure, information technology leadership will face delays in decision-making and ineffective implementation of digital strategies.

2) Staffing; staffing quality directly affects the ability to implement and sustain information technology initiatives. Leaders and staff must have digital literacy, adaptability, and a proactive mindset. Lack of skilled personnel can result in technological stagnation and underutilization of information technology resources. For Staffing aspects consist of technical proficiency: staff should possess up-to-date technical skills, participate on continuous training programs, ongoing skill development must be prioritized and leadership development: Equip deans and managers with information technology leadership skills. Without adequately skilled staff and leaders, the



implementation and sustainability of informatization strategies will fail despite having robust plans and infrastructure. 3) Information technology Infrastructure refers to infrastructure forms the backbone of informatization initiatives, reliable hardware, advanced software tools, and a robust network are critical for supporting educational and administrative information technology functions and low infrastructure can result in frequent breakdowns, security vulnerabilities, and user frustration. Evaluation for this dimension should focus on adequate investment: Consistent funding for information technology infrastructure upgrades, reliability and scalability presents systems must handle growing demands without frequent downtime and cybersecurity measures is protect data privacy and system integrity. Even with strong leadership and staffing, inadequate information technology infrastructure can severely limit the success of informatization efforts.

Figure 1

Components of Structural Dimensions Informatization Leadership of Deans

Information Technology Organizational Structure Staffing Infrastructure Clear Hierarchies **Technical Proficiency** Adequate Investment Decentralized Decision-**Continuous Training** Reliability and Making **Programs** Scalability Cross-Department Leadership Cybersecurity Measures Development Collaboration

This figure illustrates the components of Structural Dimensions in Informatization Leadership, focusing on three main dimensions. First, Organizational Structure Dimension, this dimension means clear hierarchies, decentralized authority and cross-department collaboration. Second, Staffing Dimension, on this dimension is related to technical proficiency, continuous training and leadership development. Then, information technology infrastructure dimension focuses on adequate investment, reliability and scalability, and cybersecurity measures. These components lead the leader to effective decision-making in informatization leadership relies on clarity, inclusiveness, and a well-defined strategic vision. Decisions regarding IT adoption and



integration must align with institutional objectives and address stakeholder needs to ensure coherence and effectiveness. Poorly managed decision-making often results in resource misallocation and fragmented implementation efforts

Discussion and Conclusion

The findings underscore the transformative potential of informatization leadership in vocational education. By strategically leveraging information technology based on key components of structural information leadership, deans can enhance outcomes quality, streamline administrative processes, and foster innovation. However, addressing existing challenges requires a multi-faceted approach. 1) Capacity Building, the dean concerns on comprehensive training programs should be implemented to equip deans with technical and managerial skills. 2) Resource Allocation, the institutions must prioritize funding for information technology infrastructure and professional development. 3) Stakeholder Engagement, the dean focuses on collaborative efforts involving faculty, students, and external partners are essential for successful implementation and 4) Policy Support, policymakers should provide targeted incentives and guidelines to encourage informatization efforts. Informatization leadership is a cornerstone of modern educational development, particularly in the context of higher vocational education. This highlights the crucial role of deans in driving information technology integration and identifies actionable strategies to overcome existing barriers.

Recent studies highlight several critical dimensions of informatization leadership exhibited by strengths, challenges, and opportunities. Deans demonstrate a notable commitment to embedding information technology into both academic and administrative operations, underscoring their recognition of information technology as a transformative force in higher education. Furthermore, many institutions have undertaken significant infrastructural enhancements to facilitate digital learning and optimize administrative efficiency, marking a proactive approach toward institutional digitalization as strengths. In term of challenges, despite these advancements, certain barriers impede the full realization of IT-driven goals. Limited technical expertise among deans remains a prominent challenge, constraining the effective development and execution of strategic information technology plans. Additionally, resource limitations, particularly in funding and technical support—further exacerbate these challenges,



creating bottlenecks in implementation processes. Resistance to technological change among faculty and administrative staff emerges as another critical obstacle, often slowing the adoption and normalization of digital tools within academic environments. Nevertheless, several opportunities exist to advance informatization efforts. National education policies increasingly emphasize information technology integration, fostering an enabling policy environment for digital transformation. Collaboration with industry stakeholders presents avenues for acquiring supplementary resources, technical expertise, and innovative solutions. Moreover, ongoing awareness campaigns and capacity-building initiatives, including targeted training programs, can significantly enhance the digital proficiency of both deans and faculty members, ensuring more effective and sustainable adoption of information technology in academic settings called opportunities. In conclusion, while challenges persist, the combined strengths and opportunities create a fertile ground for advancing informatization leadership among deans, ultimately driving meaningful digital transformation in higher education.

Recommendations

The study on Components of Structural Dimensions Informatization Leadership of Deans of Secondary Colleges of Higher Vocational Institutions in Guangxi offers the following recommendations to enhance informatization leadership for future research:

1) Comparative Analysis of Informatization Leadership Across Regions, future research should conduct comparative studies between Guangxi and other provinces or autonomous regions to identify regional variations in informatization leadership practices. Such studies could help understand how different cultural, economic, and social contexts influence the effectiveness of informatization leadership in higher vocational institutions.

2) Longitudinal Study on Impact of Structural Dimensions, a long-term study should be conducted to track how changes in structural dimensions' institutional performance over time by research could focus on measuring the relationship between improvements in structural dimensions and specific educational outcomes. This would help establish evidence-based practices for informatization leadership development and provide concrete data on return on investment for IT initiatives.



3) Integration of Emerging Technologies in Leadership Practices, for future research should investigate how emerging technologies like artificial intelligence, big data analytics, and cloud computing influence the structural dimensions of informatization leadership. Studies could examine the readiness of deans and institutions to adapt to these technological advances. This research area would help prepare higher vocational institutions for future technological developments and ensure leadership practices remain relevant in an evolving digital landscape.

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A Proposed Model of Secondary School Effective Administration in Cambodia: A Mixed-Method Study

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Abstract

The objectives of this study were to identify the current and desirable states of secondary school effective administration in Cambodia, and to develop a proposed model of secondary school effective administration in Cambodia. This study was divided into six stages with different samples. A questionnaire, an assessment, confirmation, and permission form, and an evaluation form for content validity served as the study tools. The reliability coefficient of the questionnaire, with an IOC range of 0.60 to 1.00, was 0.98, according to the content validity assessment. Frequency, percentage, averages, standard deviation, and the PNI-modified priority needs index were among the statistics employed for data analysis. The findings revealed that secondary school effective administration was currently at a moderate level. Information technology was determined to have the lowest level of opinions, whereas organizational cultures and strategic management had the highest level when each component was examined separately. Effective administration of secondary schools was generally at the highest level in terms of the desired state. The most opinions were expressed about leadership, followed by strategic management, and the least amount was said about school performance. When ranked by level of importance, information technology was the most important factor, followed by organizational cultures, leadership, strategic management, learning organizations, and school performance. The findings also showed



that the features of the model of secondary school effective administration were generally 96.10 percent approved and 3.98 percent disapproved of its suitability.

Keyword: Desirable state, school effective administration, leadership, information technology

Introduction

The importance of education as a key factor in human resource development, emphasizes its role in national progress. It outlines three main focuses for human resource development: enhancing the quality of scientific and technological education, improving public health services and nutrition, and promoting gender equality and social protection. Education aims to boost national economic development through comprehensive sectoral growth. However, the quality of education remains a challenge, particularly in developing countries. Quality education includes the physical and mental well-being of students, skilled teachers, clear programs, and effective school management. In Cambodia, education reform is essential for improving national development, with the government prioritizing education policies to foster high-quality human resources for the country's transition to a high-income status by 2030 and as a developed nation by 2050.

Since 2017, The Ministry of Education, Youth, and Sport (MoEYS) has implemented reforms in school management based on results, covering areas like administrative management, teaching and learning, human resource management, and financial management. The goal is to transform schools into community-oriented institutions that provide quality education and enhance student outcomes in line with national educational objectives.

By virtue of its importance, the MoEYS has also established standards for school principals, ensuring they possess the necessary qualifications, strategic thinking, leadership skills, and the ability to manage educational programs effectively in the context of the 21st century. This approach aims to strengthen the link between schools and communities, improving the quality of education and creating a supportive learning environment.

In the context of the research, it was found that the management of each school does not seem to be good and the development process of each school and the learning outcomes of students in each school have not yet yielded results worth being proud of (Mok, 2014; Hang; 2017; Lim; 2023). At the same time, the MoEYS (2018) developed a tool to evaluate good



principals to determine the principles, criteria, and procedures in each annual education conference to evaluate and select good principals at the national and sub-national levels, including providing awards and funding to the winners of good principals to encourage educational staff who have achieved good principals to strengthen their leadership and teaching management to ensure quality and effectiveness in management. The process of administering schools is not easy. As a result, the results of the administration of each school do not seem to be comprehensive (MoEYS, 2017).

Research Objectives

The objectives of this study were to identify the current and desirable states of secondary school effective administration in Cambodia, and to develop a proposed model of secondary school effective administration in Cambodia.

Research Methodology

Using a mixed-method approach, the current study included quantitative and qualitative research. According to Creswell (2015), it likewise used an exploratory sequential design, which started with a qualitative phase and progressed to a quantitative phase. In particular, there were six stages of the study as follows:

Stage 1: The following steps were involved in the study of concepts, theories, and related research: 1) reviewing concepts, theories, and related studies on a model of secondary school effective administration; 2) conducting a synthesis based on compiled data and establishing a conceptual framework; and 3) forming elements of secondary school effective administration.

Stage 2: A pilot research was carried out to examine the components of efficient elementary school management. It drew upon the idea of the primary and supporting components of good management that were established in the initial stage. This pilot study involved administrators from three schools that had best practices. According to school requirements, schools must have been in operation for at least ten years, have at least 500 students, and provide from grades 7 to 12. Additionally, administrators must have held their positions for at least ten years. The purpose of the pilot study was to gather ideas for updating the notion of the components of secondary school effective administration that would be covered in the following stage.



Stage 3: The idea of components of secondary school effective administration was the subject of a focus group discussion. Administrators and ten experts chosen by purposive selection were asked for their opinions. They held a senior teaching position in each school and earned at least master's degree in educational administration or related fields. A set of the elements would be synthesized and revised based on their recommendations.

Stage 4: Using survey research, it looked into the needs and desired and existing conditions for secondary school administration. A total of 270 participants — administrators and teachers — were chosen for the samples using the stratified random sampling technique. A questionnaire, a form for evaluating, validating, and approving a model for secondary school administration, and an assessment form for content validity were among the research instruments. In order to collect data, the researcher got the permission from the Ministry of Education, Youth and Sport (MoEYS) to each connected Provincial Offices of Education, Youth and Sport (PoEYS). Remarkably, PNI_{Modified} of frequency, percentage, means, standard deviation, and priority needs index were used to examine the data.

Stage 5: The secondary school administration model was created. And, the outcomes of PNI_{Modified}, which was used to identify needs, were considered. To do this, the PNI_{Modified} score for each need — which shows the degree of development needs — had to be chosen if it was higher than the norm. To be clear, the PNI _{Modified} scores would be compared from highest to lowest. They would then be shown in a particular model.

Stage 6: Public hearings on the model of secondary school effective administration were the focus. It was designed to give stakeholders the ability to assess, validate, and accept the model. Specifically, an assessment, confirmation, and approval form were issued. Each school was asked to submit a letter supporting from their administrators, teachers, and experts as stakeholders. A total of 20 participants were involved, including ten teachers from each school, one administrator, and six carefully selected experts.

Research Results

Overall, the results showed that secondary school effective administration was now at a medium level of effectiveness. The highest level of opinions was found in organizational cultures and strategic administration, while the lowest amount was found in information



technology. Secondary school effective administration was generally at the highest level in terms of the desired condition; in this regard, leadership was the most favored factor, followed by strategic administration; school effectiveness was at the lowest level. According to priority levels, information technology was also the most important factor, followed by organizational cultures, leadership, strategic administration, school performance, and a learning organization.

According to the data, there was an overall 96.07 percent approval rate and a 3.93 percent disapproval rate for the parts of the model of secondary school effective administration. Leadership had the highest percentage points (98.75 percent approval and 1.25 percent disapproval) when each item was examined separately. Organizational cultures came in second with 96.75 percent approval and 3.25 percent disapproval, while learning organizations had the lowest percentage points (94.49 percent approval and 5.51 percent disapproval). Additionally, every factor in this aspect had a percentage above 87.20 percent. Overall, 96.87 percent of people approved of the aspects, while 3.13 percent disapproved of them.

School effectiveness came in second with 97.18 percent approval and 2.82 percent disapproval, followed by strategic administration with the highest percentage points (98.80 percent approval and 1.2 percent disapproval) and information technology with the lowest (95.52 percent approval and 4.48 percent disapproval). In this, every ingredient had a percentage above 87.20. Information technology had the lowest percentage points, with 94.34 percent approval and 5.66 percent disapproval, while organizational cultures had the highest percentage points, with 98.12 percent approval and 1.88 percent disapproval, followed by strategic administration, which reached 99.32 percent approval and 0.68 percent disapproval, out of all the elements evaluated for feasibility. Every component in this aspect had a percentage greater than 87.20.

Discussion and Conclusion

The proposed model was created by prioritizing the following components of effective administration: leadership, strategic administration, organizational cultures, information technology, learning organizations, and school effectiveness. Schools should actually use information technology to improve the efficiency of school operations because it is an essential component. At the same time, administrators should be knowledgeable about how to use information technology for a variety of tasks, including general affairs, finance and accounting,



knowledge creation, database management, communication, and instruction (Sammons & Peter, 1999). According to Garvin (2001), schools that truly function as learning organizations and encourage the self-improvement of their staff members are likely to grow quickly and pursue greatness. Furthermore, the concept of secondary school effective administration relies on strategic administration, and administrators need to have both corporate culture and transformational leadership (Mungkasem, 2001). Since the constructed model aligns with the empirical data, it may be utilized as a guide for the construction of schools at all levels, including main element, sub-element, and indicator levels.

1. School Effectiveness

Operating the educational administration of secondary schools to accomplish the established goals is essential to their effectiveness. The findings demonstrated that student characteristics, school improvement, learning accomplishment, staff satisfaction, and ambiences and environments are the sub-elements that make up the sustainable efficacy of secondary schools. Regarding student attributes, Noomtuam's (2003) study states that students must be disciplined in accordance with laws and regulations, have a positive attitude toward their studies in school, and be ready to learn and expand their knowledge, skills, and experiences. Also, teachers should be prepared to modify their teaching methods and lesson plans in order to improve learning outcomes, and schools should analyze their current conditions in order to improve themselves, according to Bennet's (1998) study on school improvement.

2. Information Technology

Office supplies, communication tools, and software are all part of information technology, which increases operational efficiency. The findings demonstrated that there are several sub-elements that make up information technology, including database administration, communication, management, and knowledge generation. Sroinam's (2004) study states that information technology for database administration needs to have a quick search engine, a storage system, and a maintenance system. Educational institutions should have a structured database of personnel, students, finances, and accounting. To do calculations and generate reports in different formats, internal and external databases should be utilized. Publicizing events, timetables, or school news to students, parents, communities, or society at large should be done through information technology (Promsri, 2008). They should also have a two-way communication



system, such as Facebook, a forum, and a Line group chat, to get input and ideas from parents and students. Then, they should create a strategy to encourage students to turn in assignments via Line, Facebook and emails.

3. Leadership

One way to define leadership is as a leader's behavioral characteristic. The findings imply that various sub-elements, such as immunity, outcome orientation, morals, economy, rationality, and knowledge, make up sustainable leadership. In particular, immunity can be defined as administrators being ready to handle any changes, therefore they should have a system in place to handle any situation, which is comparable. According to Davies (2007), outcome orientation, on the other hand, implies that it is critical to be both academically and economically focused on results; parents' and students' faith must be reinforced, and any operation should take sustainability into account (Yawiraj, 2007).

In summary, administrators in secondary schools should be equipped with academic leadership, organizational immunity, sustainable leadership, and readiness for any changes. They should also be able to establish good governance, self-control, man-administration, and work management in parents and students, as well as be oriented toward sustainability and morals. They should also be resourceful, have discretion, expertise, and vision, be able to handle resources effectively, and constantly enhance their skills.

Suggestions

Two recommendations for future researches and actions are made in light of the findings.

Suggestions for Future Actions

1. The advancement of information technology should be prioritized by administrators in order to improve efficiency in a variety of tasks, such as database management, staff, student, finance, and accounting data searches, internal and external data analysis, and plan formulation. This will also help schools and parents/students by allowing staff to use information technology to share news, stay informed about comments and ideas, and facilitate two-way contact. Information technology can also be utilized to manage budgeting, finance, general affairs, and to assist students, employees, and other stakeholders.



- 2. In order to foster spirituality, encourage teamwork, facilitate experience sharing among employees, strengthen systematic thinking, create conceptual frameworks, and foster logical thinking, analytical skills, and creativity, administrators should establish schools as learning organizations. Together, they should strive for excellence and support lifelong learning through additional coursework and study abroad opportunities.
- 3. In addition to being outcome-oriented and academic leaders, the administrators should have sustainable leadership, be prepared for any impact of changes, and foster organizational immunity in every situation. Administrators should have morality, think about sustainability and prosperity, and exercise self-control, man administration, work management, and good governance. They should also encourage parents' and students' faith. Finally, they ought to be frugal, which entails appropriately allocating funds from budgets.

Suggestions for Future Researches

- 1. Participatory action research should be used in future research; for instance, based on the findings of this study, future studies can concentrate on enhancing aspects with a high degree of factor loading and indicators with high percentage points.
- 2. The results of future studies on the development of tests and evaluation of indicators for efficient secondary school administration should also be taken into account, as they may offer a set of instruments that administrators can use to gauge effectiveness in school administration.
- In order to identify appropriate indicators for the efficient administration of schools, a study on the creation of indicators of effective school administration in other associated schools ought to be conducted.

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Internal Quality Assurance in Primary Schools in Cambodia: A Case of Curriculum Implementation

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Abstract

The objective of this study objective of the study was to assess the implementation of internal quality assurance (IQA) in primary schools in the case study of curriculum implementation in Cambodia. A mixed-method approach and descriptive research design were used in this study. The target samples for this study included 5 district quality assurers, 15 internal school quality assurers, 25 teachers, and 50 students, in total of 95, selecting by using purposeful, stratified random sampling and simple random sampling techniques. Questionnaires and interviews were used for data collection. Descriptive analysis, specifically frequency and percentage, was used to assess quantitative data, whereas thematic analysis was used for qualitative data. The results show that stakeholders' perceptions towards IQA were favorable. Accordingly, the roles of IQA in primary school instruction delivery are evaluated, along with the supervision of instructional delivery and the provision of suggestions to improve instruction delivery, taking, evaluating, and reporting on students' opinions regarding instructional delivery processes, reviewing teacher notes, the scheme of work, lesson notes, and the log book and offering suggestions, suggesting good methodology for instruction delivery, assessing the quality of examinations and tests given, providing actionable feedback, performing peer and self-student assessments, and making sure the school schedule is effectively followed.

Keyword: International Quality Assurance, Curriculum Implementation, Primary School



Introduction

The concept of internal quality assurance (IQA) is not new; it was first used in industrialized nations to maintain production trucks in large-scale manufacturing (Allais, 2009). In order to determine whether a whole field of work on issues of education policy developed around the idea of quality as related systems of processes and organizations, this process was sparked by the realization that manufacturing industries needed quality products and that quality professionals had developed dramatically (Hang, 2017). According to Hang (2017), educational quality assurance implied providing quality in the educational system by combining the concepts of assurance and educational quality. A quality assurance system, for example, is the actual implementation of quality assurance principles for clear standards that align with the attributes of educational institutions (Lim, 2023).

In Cambodian context, quality assurance requires a lot of attention. This is because the socioeconomic development of any nation is anticipated to benefit from the primary education sub-sector. Additionally, the industry is seen as a good supply of workers and a practical means of bridging the gap between primary, lower and upper secondary education (Hang, 2017; Lim, 2023). Because of this, Cambodia, like other developing nations, has made a commitment to providing its citizens with high-quality primary and secondary education since gaining independence (Hang, 2017). This is demonstrated by the various educational policies and programs that have been developed. The literature demonstrates that Cambodian primary education system has not been able to fulfill its goals due to a number of obstacles (Hang, 2017; Lim, 2023). Research clearly shows that the success of all of the aforementioned programs is more noticeable when it comes to expanding primary school access; yet, there is ample evidence to support the claim that primary education quality has not improved. It should also be noted that much research has been conducted with regard to the role of the school inspection as education quality assurance (EQA) mechanism in promoting education in Cambodia, including primary education. In addition, it is evident from the literature and research studies that procedures and mechanism on how school inspections are supposed to be conducted is at least documented (Mok, 2014; Hang, 2017; Lim, 2023).

By virtue of its importance, numerous studies and other pieces of literature provide evidence of how the EQA mechanism functions in Cambodian educational system, but little is known about the function and application of IQA in classrooms, especially with regard to how this



quality control method oversees and monitors various facets of the primary curriculum. The need for this study, which aims to evaluate the application of internal quality assurance in Cambodian primary schools, is justified by this.

Research Objectives

The objectives of this study were twofold: (1) to find out the stakeholders' perceptions of IQA in primary schools in Cambodia; and (2) to assess the role of IQA to effective instructional delivery in primary schools in Cambodia.

Research Questions

Referring the research objectives above, the research questions were formulated.

- 1. What are stakeholders' perceptions about IQA in primary schools in Cambodia?
- 2. How effective is the implementation IQA in promoting instructional delivery in primary schools in Cambodia?

Theoretical Framework

There are different theories, which guide issues related to quality assurance in educational context. This study was guided by three theories: (1) instructional supervision theory; (2) constructivist theory of learning; and (3) Crosby's theory as founded by Vygotsky and Philip Crosby.

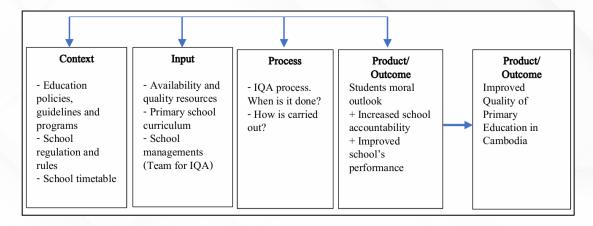
Conceptual Framework

This study uses the Stufflebean Model of evaluation, also referred to as the CIPP model, to evaluate the adoption of internal quality assurance in primary schools in Cambodian context. A combination of the terms Context, Input, Process, and Product is called CIPP. The model was formally created by Stufflebean in early 1971. Program, product, institution, and system evaluations can be guided by the CIPP paradigm. Figure 1 below presents the conceptual framework used in the study.



Figure 1:

Conceptual Framework of the Study (Adopted from Stufflebeam, 1971)



Research Methodology

This study used a mixed-method approach, collecting, analyzing, and presenting data using both qualitative and quantitative techniques at the same time. Because the researcher wishes to cross-validate data and findings from both methodologies, the mixed strategy was chosen (Creswell, 2003). This study evaluated the application of IQA in Cambodian primary schools using a case study research design, one of the many accessible research designs.

Target population refers to the total number of units in the area or field of study, a population is the universe of units from which the sample is to be selected. The target samples tangled in this study were: 5 district quality assurers, 15 internal school quality assurers, 25 teachers, and 50 students, in total of 95 target research samples using three sampling techniques, namely: purposeful, stratified random sampling and simple random sampling techniques.

The study used self-administered questionnaires to collect data from the target research samples. Questionnaires are best option to be used to the two named groups of samples because the method has the ability to collect data from large segments of the sample. Frequency and percentage were employed to assess defendant's response on four variables basing on 5-Likert scale with scales 1=strongly disagree, 2=disagree, 3= I don't know, 4=agree and 5=strongly agree. But, the semi-structured interview was used to collect data from district quality assurers, and school directors. The researcher opts to use this method because it allows direct communication with the research participants and has the ability to get in-depth information from defendants.



In trying to make sense from the data collected, analysis of data was done immediately after the collection. Quantitative data, were sorted, coded, summarized and analyzed by using Microsoft Excel computer software's. Descriptive analysis (frequency and percentage) were used to analyze first, and second objective. Thereafter the findings were presented by using graphs and tables. Qualitative data were analyzed through content analysis. Content analysis method was employed to analyze collected data from interview and questionnaire. Thereafter, data were organized under various themes according to objectives and scrutinized.

Research Results

The results below are in line with specific objectives of the study which were: to find out stakeholders' perceptions of IQA in primary schools in Cambodia, to assess the role of IQA to effective instructional delivery in primary schools in Cambodia and to identify challenges facing implementation of IQA in primary schools in Cambodia. The data obtained were encoded in Microsoft Excel for analysis and interpretation and presented in bar chart, frequencies and percentage table for findings elaboration as fine as clarification.

1. Perceptions of Stakeholders towards IQA Implementation

The first part of the study looked at how stakeholders in Cambodian primary schools perceived IQA. Based on factors found through closed-ended questionnaires, stakeholders' (district quality assurers, teachers, and IQA committee members) perspectives of IQA in primary schools were investigated using a 5-point Likert scale (as well as frequency and percentage). A stakeholder's positive or negative view of IQA in primary schools can be determined by using frequency and percentage, which allow for the proportionality of samples' perceptions on the variables. Results from interviews, open-ended questions, and students were also given. The findings are compiled in Tables 1 through 4 below.



Table 1

IQA Implementation based on Perceptions of District Quality Assurers

	Variables	SD	%	D	%	N	%	A	%	SA	%
1.	IQA has made improvement in	0	0	1	20	1	20	3	60	0	0
	teaching and learning process in										
	schools which made students meet										
	their needs and expectations toward										
	quality education is highly growing										
	compared to before.										
2.	No need of EQA since IQA is	1	20	4	80	0	0	0	0	0	0
	enough.										
3.	IQA has improved teachers code of	0	0	0	0	1	20	4	80	0	0
	conduct in teaching and learning										
	process.										
4.	Teachers selected to be part of IQA	0	0	3	60	2	40	0	0	0	0
	has enough knowledge concerning										
	quality assurance.										
5.	IQA is very effective and has	0	0	3	60	1	20	1	20	0	0
	control to make sure quality										
	education is achieved within the										
	school.										

Table 2

IQA Implementation based on Perceptions of Internal Assurers

	Variables	SD	%	D	%	N	%	A	%	SA	%
1.	IQA has made improvement in	0	0	4	26.7	4	26.7	7	46.7	0	0
	teaching and learning process in										
	schools which made students meet										
	their needs and expectations										
	toward quality education is highly										
	growing compared to before.										



	Variables	SD	%	D	%	N	%	A	%	SA	%
2.	No need of EQA since IQA is	0	0	9	60	6	40	0	0	0	0
	enough.										
3.	IQA has improved teachers code	0	0	5	33.3	2	13.3	8	53.3	0	0
	of conduct in teaching and										
	learning process.							ħ,			
4.	Teachers selected to be part of	0	0	10	66.7	5	33.3	0	0	0	0
	IQA has enough knowledge										
Z	concerning quality assurance.										
5.	IQA is very effective and has	0	0	11	73.3	2	13.3	2	13.3	0	0
	control to make sure quality										
	education is achieved within the										
	school.										

Table 3

IQA Implementation based on Perceptions of Teachers

	Variables	SD	%	D	%	N	%	A	%	SA	%
1.	IQA has made improvement in	0	0	5	20	4	16	16	64	0	0
	teaching and learning process in										
	schools which made students meet										
	their needs and expectations toward										
	quality education is highly growing										
	compared to before.	٦,	1								
2.	No need of EQA since IQA is	7	28	18	72	0	0	0	0	0	0
	enough.										
3.	IQA has improved teachers code of	0	0	6	24	8	32	11	44	0	0
	conduct in teaching and learning										
	process.										
4.	Teachers selected to be part of IQA	0	0	19	76	6	24	0	0	0	0
	has enough knowledge concerning										
	quality assurance.										



	Variables	SD	%	D	%	N	%	A	%	SA	%
5.	IQA is very effective and has	0	0	22	88	1	4	2	8	0	0
	control to make sure quality										
	education is achieved within the										
	school.										

Table 4

IQA Implementation based on Perceptions of Students

	Variables	SD	%	D	%	N	%	A	%	SA	%
1.	IQA has made improvement in teaching and learning process in schools which made students meet their needs and expectations toward quality education is highly growing compared to before.	0	0	11	22	11	22	28	56	0	0
2.	No need of EQA since IQA is enough.	8	16	36	72	6	12	0	0	0	0
3.	IQA has improved teachers code of conduct in teaching and learning process.	0	0	12	24	12	24	26	52	0	0
4.	Teachers selected to be part of IQA has enough knowledge concerning quality assurance.	0	0	34	68	1	2	15	30	0	0
5.	IQA is very effective and has control to make sure quality education is achieved within the school.	0	0	40	80	4	8	6	12	0	0

In short, With the exception of the variable that more than 50% of samples disagree and strongly disagree with, which was that there is no need for EQA because IQA, teachers chosen to be part of IQA have sufficient knowledge about quality assurance, and IQA is very effective and has control to ensure that quality education is achieved within the schools, the results show that



target samples have positive perceptions of internal quality assurance. In addition to the results mentioned above, the interview results and open-ended questions are also described. The samples showed that although they had positive opinions of IQA, they were not satisfied with the manner it was carried out because some IQA members were writing reports without ever attending the class to be assessed and had the knowledge of quality assurance. One respondents said "IQA is good and when effectively monitored, practical guideline is given it will improve instructional delivery in schools....". Therefore, government should provide seminars concerning IQA to create awareness to stakeholders, generate guidelines to build trust among stakeholders on IQA, and make instructional delivery effective therefore reaching quality education.

Out of 50 students, 27 (54%) responded "Yes" and 23 (46%) "No" when asked if teachers' performance in the teaching and learning process has improved in Cambodia's quest for high-quality education. The fact that 54% of students chose "Yes" suggests that teachers are doing a moderately better job of guiding students through the teaching and learning process that leads to high-quality education. Additionally, students see internal quality assurance favorably.

2. Effective IQA in Promoting Instructional Delivery

In order to assess the role of IQA to effective instructional delivery in primary schools in Cambodia was among the objectives involved in this study which was presented in Tables 5 to 8 as follows:

Table 5

IQA Instructional Delivery based on Observation of District Quality Assurers

	Variables	SD	%	D	%	N	%	A	%	SA	%
1.	Instructional delivery supervision	0	0	0	0	0	0	4	80	1	20
	and provision of										
	suggestion to improve instruction										
	delivering.										
2.	Taking, assessing and providing	0	0	0	0	1	20	3	60	1	20
	reports on students' views										
	regarding instructional delivery										
	processes.										



Variables	SD	%	D	%	N	%	A	%	SA	%
Ensure school timetable is effectively followed.	0	0	0	0	1	20	4	80	0	0
Revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions.	1	20	2	40	0	0	2	40	0	0
Suggesting good methodology for instruction delivery.	0	0	1	20	1	20	3	60	0	0
Assessment of quality examination and tests given.	0	0	3	60	1	20	1	20	0	0
Providing actionable feedback.	0	0	0	0	1	20	4	80	0	0
Performing self-student assessment and peer feedback.	0	0	0	0	1	20	3	60	1	20
	Ensure school timetable is effectively followed. Revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions. Suggesting good methodology for instruction delivery. Assessment of quality examination and tests given. Providing actionable feedback. Performing self-student assessment	Ensure school timetable is effectively followed. Revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions. Suggesting good methodology for instruction delivery. Assessment of quality examination and tests given. Providing actionable feedback. 0 Performing self-student assessment	Ensure school timetable is effectively followed. Revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions. Suggesting good methodology for one instruction delivery. Assessment of quality examination one and tests given. Providing actionable feedback. one of the providing self-student assessment of the providing of the providing self-student assessment one of the providing self-student assessment on the providing self-student assessment one of the providing self-student assessment on the providi	Ensure school timetable is effectively followed. Revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions. Suggesting good methodology for 0 0 1 instruction delivery. Assessment of quality examination 0 0 3 and tests given. Providing actionable feedback. 0 0 0 Performing self-student assessment 0 0 0	Ensure school timetable is effectively followed. Revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions. Suggesting good methodology for 0 0 1 20 instruction delivery. Assessment of quality examination 0 0 3 60 and tests given. Providing actionable feedback. 0 0 0 0 Performing self-student assessment 0 0 0 0	Ensure school timetable is 0 0 0 0 1 effectively followed. Revisiting teachers notes, 1 20 2 40 0 scheme of work, lesson notes, log book and providing suggestions. Suggesting good methodology for 0 0 1 20 1 instruction delivery. Assessment of quality examination 0 0 3 60 1 and tests given. Providing actionable feedback. 0 0 0 0 1 1 Performing self-student assessment 0 0 0 0 1	Ensure school timetable is 0 0 0 0 0 1 20 effectively followed. Revisiting teachers notes, 1 20 2 40 0 0 scheme of work, lesson notes, log book and providing suggestions. Suggesting good methodology for 0 0 1 20 1 20 instruction delivery. Assessment of quality examination 0 0 3 60 1 20 and tests given. Providing actionable feedback. 0 0 0 0 0 1 20 Performing self-student assessment 0 0 0 0 1 20	Ensure school timetable is 0 0 0 0 0 1 20 4 effectively followed. Revisiting teachers notes, 1 20 2 40 0 0 2 scheme of work, lesson notes, log book and providing suggestions. Suggesting good methodology for 0 0 1 20 1 20 3 instruction delivery. Assessment of quality examination 0 0 3 60 1 20 1 and tests given. Providing actionable feedback. 0 0 0 0 0 1 20 4 Performing self-student assessment 0 0 0 0 1 20 3	Ensure school timetable is 0 0 0 0 1 20 4 80 effectively followed. Revisiting teachers notes, 1 20 2 40 0 0 2 40 scheme of work, lesson notes, log book and providing suggestions. Suggesting good methodology for 0 0 1 20 1 20 3 60 instruction delivery. Assessment of quality examination 0 0 3 60 1 20 1 20 and tests given. Providing actionable feedback. 0 0 0 0 0 1 20 4 80 Performing self-student assessment 0 0 0 0 1 20 3 60	Ensure school timetable is 0 0 0 0 1 20 4 80 0 effectively followed. Revisiting teachers notes, 1 20 2 40 0 0 2 40 0 scheme of work, lesson notes, log book and providing suggestions. Suggesting good methodology for 0 0 1 20 1 20 3 60 0 instruction delivery. Assessment of quality examination 0 0 3 60 1 20 1 20 0 and tests given. Providing actionable feedback. 0 0 0 0 0 1 20 3 60 1 Performing self-student assessment 0 0 0 0 1 20 3 60 1

Table 6

IQA Instructional Delivery based on Observation of Committee

	Variables	SD	%	D	%	N	%	A	%	SA	%
1.	Instructional delivery supervision and provision of suggestion to improve instruction delivering.	0	0	0	0	0	0	9	60	6	40
2.	Taking, assessing and providing reports on students' views regarding instructional delivery processes.	0	0	0	0	0	0	12	80	3	20
3.	Ensure school timetable is effectively followed.	0	0	3	20	4	26.7	8	53.3	0	0
4.	Revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions.	3	20	3	20	0	0	9	60	0	0



	Variables	SD	%	D	%	N	%	A	%	SA	%
5.	Suggesting good	0	0	2	13.3	1	6.7	12	80	0	0
	methodology for instruction										
	delivery.						n.				
6.	Assessment of quality	0	0	4	26.7	1	6.7	10	66.7	0	0
	examination and tests given.		1					4			
7.	Providing actionable	0	0	0	0	2	13.3	13	86.7	0	0
	feedback.										
8.	Performing self-student	0	0	0	0	1	6.7	13	86.7	1	6.7
	assessment and peer										
	feedback.										

Table 7

IQA Instructional Delivery based on Observation of Teachers

	Variables	SD	%	D	%	N	%	Α	%	SA	%
1.	Instructional delivery supervision and provision of suggestion to improve instruction delivering.	0	0	0	0	0	0	18	72	7	28
2.	Taking, assessing and providing reports on students' views regarding instructional delivery processes.	0	0	10	40	0	0	12	48	3	12
3.	Ensure school timetable is effectively followed.	0	0	6	24	4	16	15	60	0	0
4.	Revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions.	1	4	5	20	0	0	19	76	0	0
5.	Suggesting good methodology for instruction delivery.	0	0	6	24	2	8	17	68	0	0
6.	Assessment of quality examination and tests given.	0	0	12	48	1	4	12	48	0	0



	Variables	SD	%	D	%	N	%	A	%	SA	%
7.	Providing actionable feedback.	0	0	0	0	5	20	20	80	0	0
8.	Performing self-student assessment	0	0	0	0	5	20	16	64	4	16
	and peer feedback.										

Table 8

IQA Instructional Delivery based on Overall Observation

	Variables	SD	%	D	%	N	%	A	%	SA	%		
1.	Instructional delivery supervision and provision of	0	0	0	0	0	0	36	72	14	28		
	suggestion to improve instruction delivering.												
2.	Taking, assessing and providing reports on students' views regarding instructional delivery	0	0	10	20	0	0	32	64	8	16		
	processes.												
3.	Ensure school timetable is effectively followed.	1	2	9	18	9	18	31	62	0	0		
4.	Revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions.	5	10	11	22	0	0	33	66	1	2		
5.	Suggesting good methodology for instruction delivery.	0	0	10	20	8	16	32	64	0	0		
6.	Assessment of quality examination and tests given.	0	0	21	42	4	8	25	50	0	0		
7.	Providing actionable feedback.	0	0	2	4	6	12	41	82	1	2		
8.	Performing self-student assessment	0	0	1	2	10	20	33	66	6	12		

In short, the results show that instructional delivery supervision and provision of suggestion to improve instruction delivering, taking, assessing and providing reports on students views regarding instructional delivery processes, ensure school timetable is effectively followed,



revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions, suggesting good methodology for instruction delivery, assessment of quality of examination and tests given, providing actionable feedback and performing self-student assessment and peer feedback, are the role of IQA to effective instructional delivery in primary schools in Cambodia. This is because respondents agree and strongly agree on the role by more than 50%.

Results from open ended questions and interview show that, the other roles for IQA to effective instructional delivery in primary schools in Cambodia are: to promote friendly environment for instructional delivery to teachers and students, creating a room for students and teachers to give their views concerning teaching and learning process so that they can incorporate to all and put them into practice, accountability to fulfilling their duties, make sure teaching and learning materials are available to enable smooth teaching and learning processes as like as make follow-ups of comments given on instructional delivery.

And when students were asked on the role to be practiced by teachers when they assess their fellow teacher(s) for effective instructional delivery at this school, they said that: they should make sure that we are given chance to ask question during instructional delivery because it has been a tendency for some teachers to be hash or don't attend the question(s) when asked, to ensure examination are being conducted regularly to enable us be competent, we should be fairly involved to give opinions and be considered regarding teaching and learning process, teachers should "......participate us during teaching and learning process and not be as a main source of information.......", to ensure we do practical for all subtopic that require practical, they should make sure we have free periods in a time table for we to ask questions teachers in areas that we did not understand well.

Discussion and Conclusion

For the perceptions of stakeholders towards IQA, the results indicated that the target samples had good perceptions regarding internal quality assurance since more than 50% of samples agree and strongly agree on almost all variables (IQA has made improvement in teaching and learning process in primary schools which made students meet their needs and expectations toward quality education is highly growing compared to before, IQA has improved teachers code of conduct in teaching and learning process) that aimed to measure the perception of respondents



regarding IQA, except on variable: No need of EQA since IQA, teachers selected to be part of IQA has enough knowledge concerning quality assurance and IQA is very effective and has control to make sure quality education is achieved within the schools, which has been disagreed highly. The results are similar to those of Lupimo, (2014) who stated that the aim of internal quality assurance process is to establish and maintain the quality of assessment for internally assessed and externally accredited learning programs across all attributed program; nationally recognized qualifications and apprenticeship standards, but if the policy guiding them is not clear make the quality assurer process ineffective. Also, Otera, (2015), argued that when IQA has guidelines and mandate to perform assurance activities, it make teaching and learning process operative however EQA is important to recheck the quality of IQA to assure effective teaching and learning process.

For the IQA role to effective instructional delivery, the results show that instructional delivery supervision and provision of suggestion to improve instruction delivering, taking, assessing and providing reports on students views regarding instructional delivery processes, ensure school time table is effectively followed, revisiting teachers notes, scheme of work, lesson notes, log book and providing suggestions, suggesting good methodology for instruction delivery, assessment of quality of examination and tests given, providing actionable feedback, performing self-student assessment and peer feedback, to promote friendly environment for instructional delivery to teachers and students, creating a room for students and teachers to give their opinions concerning teaching and learning process so that they can integrate to all and put them into practice, accountability to fulfilling their duties, make sure teaching and learning materials are available to enable smooth teaching and learning processes and make follow-ups of comments given on instructional delivery, are the role of IQA to effective instructional delivery in primary schools in Cambodia. This is because respondents agree and strongly agree on the variables through close-ended questions, and interview by more than 50%. The findings concur with those of Commission (2018) who stated that while there are concerns that IQA may inhibit development, innovation and demotivate staff, countries have taken a variety of approaches to moderate their impact and to place greater emphasis on improvement. For example, a number of countries highlighted the importance of moving away from quality assurance as supervision to a more open and suggestions. Kotirde and Yunos (2014) argue that there is some evidence that



strong teacher-to-teacher trust build a collective focus on improving instruction and learning. Therefore, IQA should create trust to teachers to make the process of quality assurance active hence effective instructional delivery.

Suggestions

Suggestions for Future Practices

- 1. Stakeholders has good perceptions towards IQA, although stakeholders have good perceptions towards IQA, but are not full satisfied the way IQA is run. Therefore, government can revise and improve laws to permit effectiveness of IQA, therefore, satisfy stakeholder has and enable active instructional delivery.
- 2. The study identified various roles that can be practiced by IQA in primary schools. The identified roles can be considered for implementation and development of guidelines for effective instructional delivery.

Suggestions for the Future Study

- 1. This study was specifically done in primary schools. The proposed future researches may conduct the same study in lower or upper secondary schools.
- 2. The study specifically based on perceptions of stakeholders toward IQA, and role of IQA, future studies may consider factors for introduction of IQA to be more realistic.

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Critical Reading Skills: A Review of Problems and Needs Among University Students

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Abstract

This research aimed to comprehensively review university students' various challenges and needs in developing their critical reading skills. The research targeted 17 papers from national and international sources published between 2014 and 2024. The research utilized a frequency analysis table as its primary method. This study examined relevant documents and literature by compiling academic texts and related works. Components with a frequency of six or more were selected for analysis based on the frequency analysis tables. Data analysis involved content analysis to summarize key points, which were then classified and organized according to a synthesized document analysis form. Many students struggle with comprehension, inference, and argument evaluation, relying on lower-order cognitive strategies that hinder deep analytical engagement. The findings suggest that incorporating structured frameworks such as DRTA, SQ5R, and task-based learning strategies can significantly enhance students' ability to engage with texts critically. Also, the results reveal a pressing need for structured, multi-faceted approaches to improve students' critical reading skills. Through this study, the researcher seeks to identify specific areas for improvement and to propose strategies that can help facilitate better outcomes in students' critical reading development.

Keyword: Critical Reading Skills, Problems and Needs, University Students



Introduction

Critical reading skills are not just a desirable trait for academic success, but an urgent need, particularly in higher education. Students are expected to critically engage with complex texts and evaluate arguments, tasks that are becoming increasingly challenging due to inadequate preparation at earlier stages of education and a lack of targeted interventions at the tertiary level. These challenges necessitate a deeper understanding of students' problems and needs in developing critical reading skills to devise effective instructional strategies.

The difficulty of teaching critical reading and related critical thinking skills has been extensively explored, with scholars like Willingham (2007) emphasizing that these skills do not develop naturally but require deliberate practice and structured instruction. Willingham argues that critical thinking is domain-specific, meaning students often struggle to transfer critical thinking skills learned in one context to another. This observation has significant implications for critical reading instruction, as students may lack the foundational content knowledge required to engage deeply with texts in various academic disciplines. Similarly, Lau (2011) emphasizes that critical reading is a learned skill that requires practice, reflection, and structured guidance, yet such elements are often missing from traditional curricula. Students may struggle to navigate and critically engage with complex academic texts without proper scaffolding. As a result, educators must focus on teaching abstract strategies for analyzing texts and equipping students with the requisite background knowledge to apply these strategies effectively.

The importance of critical reading extends beyond academic performance, influencing students' ability to navigate an information-rich society. In an era marked by misinformation and the widespread availability of digital content, the capacity to critically evaluate sources and arguments is more crucial than ever (Facione, 2020). This challenge is further exacerbated by the growing reliance on online information, where students must discern credible sources amid a sea of unreliable or biased content (Wineburg et al., 2016). Despite this, university curricula often prioritize content acquisition over critical engagement, leaving students ill-equipped to discern credible information from unreliable sources. This disconnect highlights the need for a pedagogical shift that emphasizes fostering critical reading abilities alongside disciplinary knowledge.



Previous research has explored various factors contributing to students' difficulties with critical reading, including limited exposure to complex texts, ineffective teaching practices, and a lack of motivation or confidence in tackling challenging material (Durkin, 2011; Grabe & Stoller, 2020). Students often encounter a lack of explicit instruction in reading strategies, which compounds their difficulties (Kern, 2000). Willingham (2007) and Zwiers (2014) highlight the importance of embedding critical reading strategies into subject-specific learning, as such integration fosters deeper comprehension and engagement. Additionally, motivation plays a crucial role, making students more likely to engage critically when they perceive the relevance and value of the texts they analyze (Ryan & Deci, 2020). This underscores the need for instructional approaches that develop students' skills and foster a mindset that values and rewards critical engagement with texts.

While these studies provide valuable insights, a gap exists in understanding the specific needs and contextual challenges university students face across diverse disciplines and educational systems. Addressing this gap is essential to developing tailored interventions that cater to the unique demands of different academic contexts.

This paper reviews existing literature on the problems and needs related to critical reading skills among university students by identifying the key obstacles. Research also highlights several specific needs for students in developing their critical reading skills. Through this analysis, the research aims to identify areas for improvement and propose strategies to promote better outcomes in developing students' critical reading skills. This work is not just for academic interest, but it provides actionable insights for educators, curriculum developers, and policymakers. It empowers them with targeted strategies to enhance critical reading instruction and outcomes in higher education, making them key players in this important field.

Research Objectives

To comprehensively review university students' problems and needs in developing their critical reading skills.



Research Methodology

1. Data Source

This study reviews papers and documentary research on problems and needs in developing critical reading skills. The researcher selected 17 scholarly papers from national and international sources published between 2014 and 2024.

2. Data Analysis

The data were analyzed using content analysis methods and categorized based on academic relevance. The results were then compiled into a frequency analysis table. Ultimately, only those aspects with a frequency value of 6 or higher were selected for further discussion.

Research Results

According to the studying of the scope of academic work and synthesizing the content with the frequency distribution synthetic table, the result shows the important components of the problems and the needs in developing students' critical reading skills at the university level as follows:

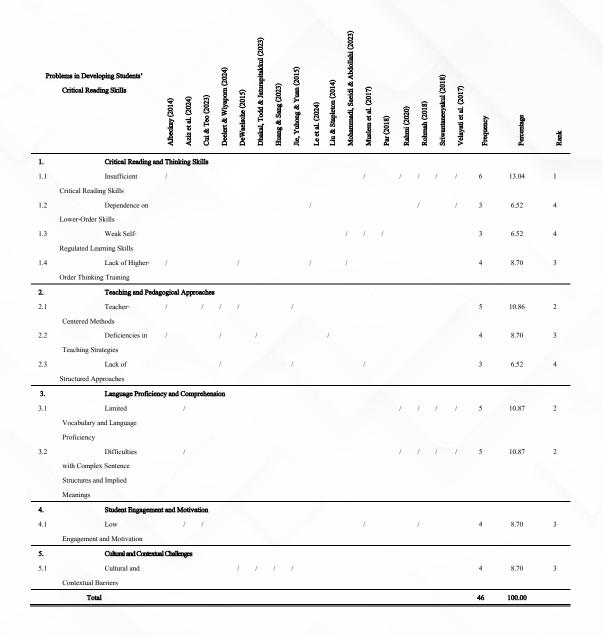
1. Problems in Developing Students' Critical Reading Skills

Numerous studies indicate that university students face challenges in developing their critical reading skills. Research highlights the issues into five categories: critical reading and thinking skills, teaching and pedagogical approaches, language proficiency and comprehension, student engagement and motivation, and cultural and contextual challenges. These challenges in enhancing critical reading skills at the university level are discussed in 17 national and international research articles, as shown in Table 1.



Table 1

Problems in Developing Students' Critical Reading Skills



As shown in Table 1, it reveals significant barriers to critical reading development across different educational contexts. The most frequently cited challenge is students' insufficient critical reading skills (f=6, 13.06%), affecting six studies. Many students lack essential comprehension strategies and struggle with inference, bias detection, and argument evaluation. Additionally, lower-order cognitive strategies dominate their reading approach, preventing deep analytical



engagement. Without a strong foundation in critical reading, students cannot interact meaningfully with complex texts, limiting their academic success.

A significant contributing factor to this deficiency is the prevalence of teacher-centered instruction (f= 5, 10.86%), which has been reported in five studies. Traditional lecture-based teaching discourages classroom discussions, minimizing opportunities for students to question, analyze, and critically engage with reading materials. These methods promote passive learning rather than encouraging independent thought. Consequently, many students do not develop the necessary higher-order thinking skills, such as analysis, synthesis, and evaluation, which are crucial for critical reading. The lack of explicit instruction in argumentation, logical reasoning, and critical questioning techniques further exacerbates the problem.

As mentioned in five studies, another critical challenge is limited language proficiency (f=5, 10.86%). Many students struggle with vocabulary limitations, complex sentence structures, and implied meanings, preventing them from comprehending and critically evaluating texts. This issue is particularly significant for English as a Foreign Language (EFL) learners, who may have difficulty engaging with academic texts, identifying key arguments, and distinguishing between main ideas and supporting details. Without adequate language proficiency, students often resort to memorization and surface-level comprehension rather than deep reading strategies.

Four studies identified a lack of engagement and motivation related to these issues. Many students rely on rote learning and exam-focused approaches, prioritizing recall over critical analysis. Without meaningful interaction with reading materials, students are less likely to develop independent reading habits or see the value in critical engagement. The absence of interactive, student-driven learning methods further discourages participation and leads to disengagement from the learning process.

Beyond these cognitive and pedagogical issues, cultural and contextual barriers also significantly shape students' attitudes toward critical reading. Four studies report that students are conditioned to follow structured, teacher-led approaches that discourage questioning and open discourse in some cultures. In such environments, deference to authority is prioritized over independent thinking, making it difficult to foster a culture of critical inquiry.

In addition, several studies highlight deficiencies in teaching strategies and a lack of structured instructional approaches for developing critical reading skills. Many teachers are not



adequately trained in implementing systematic reading methods such as SQ5R, scaffolding, and dialogic teaching. As a result, students lack guided support in building their analytical and evaluative skills, further hindering their progress.

As reported in three studies, students' weak self-regulated learning (SRL) skills are another pressing concern. Many students fail to self-monitor their comprehension, set learning goals, and apply metacognitive strategies to improve their reading effectiveness. Without structured support in developing self-regulation and independent learning strategies, students remain dependent on external guidance rather than developing autonomy in their learning process.

Overall, the frequency of these problems underscores the systemic challenges in fostering critical reading skills. The dominance of teacher-centered instruction, insufficient higher-order thinking development, language proficiency barriers, lack of student engagement, and cultural constraints contribute to students' struggles in critical reading. Addressing these issues requires a fundamental shift in pedagogy, curriculum design, and teacher training. A move toward structured, student-centered critical reading programs, explicit instruction in higher-order thinking, vocabulary enrichment strategies, and engagement-driven learning approaches can help mitigate these challenges. Additionally, culturally sensitive pedagogical practices encouraging open discussion and self-regulated learning strategies will equip students with the skills needed for critical reading and lifelong learning.

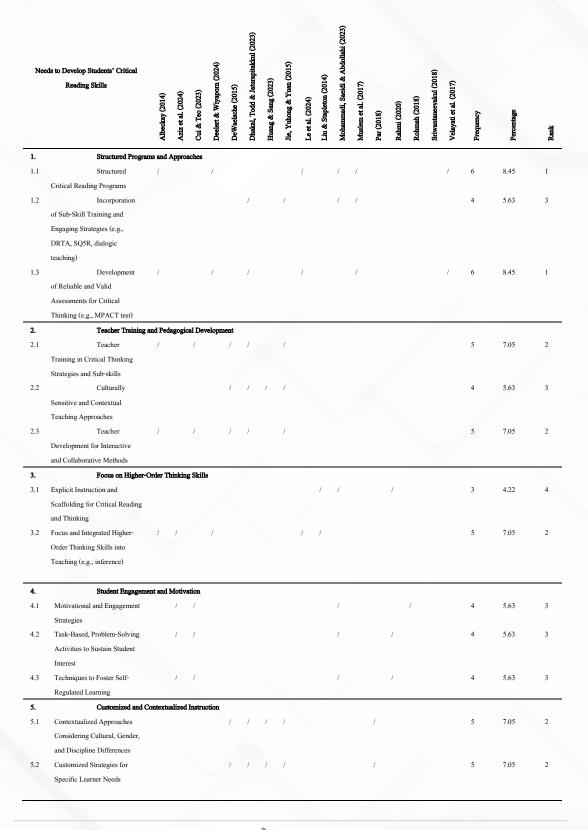
2. Needs to Develop Students' Critical Reading Skills

Many studies indicate that university students need to develop their critical reading skills. Research highlights the needs, categorized into six categories: structured programs and approaches, teacher training and pedagogical development, focus on higher-order thinking skills, student engagement and motivation, customized and contextualized instruction, and comprehensive skill integration. The needs to enhance critical reading skills at the university level is discussed in 17 national and international research articles, as shown in Table 2.



Table 2

Needs to Develop Students' Critical Reading Skills





Comprehensive Skill Integra	tion						
Integration of	/	/	/	/		4	5.63
Critical Thinking Sub-Skills							
Across Curriculum Levels and							
Subjects							
Long-term,	/	/	/	/		4	5.63
Immersive Interventions to							
Cultivate Critical Dispositions							
Use of Dialogic	/	/ /				3	4.22
and Collaborative Methods to							
Enhance Critical Engagement							
Total						71	100.00

As shown in Table 2, it highlights key interventions required to address the challenges in developing critical reading skills. The most frequently mentioned need is the implementation of structured critical reading programs (f=6, 8.45%), emphasized in six studies. These programs provide a systematic approach to developing comprehension, inference, and analytical skills, ensuring students receive targeted instruction in critical reading. The studies suggest that incorporating structured frameworks such as DRTA, SQ5R, MPACT assessments, and task-based learning strategies can significantly improve students' ability to engage with texts critically. Without a well-structured reading program, students may struggle with fragmented, inconsistent exposure to critical reading techniques, limiting their long-term development.

Another critical requirement is teacher training in critical thinking strategies (f=5, 7.05%), identified in five studies. Many teachers lack the expertise to integrate critical thinking instruction into their lessons effectively. Training programs should focus on interactive, student-centered teaching approaches, higher-order questioning techniques, and dialogic teaching methods that foster deep engagement with texts. Moreover, cultural and contextual factors play a significant role in shaping educational practices. A lack of culturally responsive teaching methods can hinder students' ability to challenge ideas or question texts critically. Thus, teacher training should also emphasize contextually adaptive pedagogies, ensuring educators can support diverse learners in developing critical thinking skills.

The need for an explicit focus on higher-order thinking skills is another recurring theme, highlighted in five studies. Many students cannot evaluate, synthesize, and critically analyze information due to an overreliance on lower-order cognitive skills such as memorization. To address this, educators must integrate explicit instruction in counter argumentation, reasoning, inference, and logical analysis into the curriculum. A shift from fact-based assessments to critical reasoning tasks can encourage deeper engagement with texts. Additionally, embedding critical



thinking exercises in reading activities will help students develop the habit of questioning and analyzing information rather than simply accepting it at face value.

The need to enhance student engagement and motivation is closely related to this, as reported in four studies. Many students remain passive learners, disengaged from reading activities due to uninteresting instructional methods and an overemphasis on rote learning. To counteract this, educators should implement interactive, discussion-based, and task-driven approaches to foster engagement. Strategies such as collaborative reading, problem-solving tasks, gamification, and project-based learning can make critical reading more meaningful and stimulating. Furthermore, building students' confidence in critical engagement is crucial, as some learners may hesitate to express opinions or challenge ideas due to fear of making mistakes.

Another key need is customized and contextualized instruction, which has been emphasized in four studies. Students come from diverse backgrounds, with differences in language proficiency, cognitive styles, gender, and disciplinary orientations. A one-size-fits-all approach to critical reading instruction does not cater to these variations. For example, field-dependent learners may require structured guidance, while field-independent learners may benefit from open-ended critical questioning tasks. Similarly, studies highlight how students in certain cultures may struggle with self-expression and argumentation, requiring instructional adjustments that respect cultural learning norms while fostering critical engagement. Customized strategies, such as adaptive learning materials, targeted scaffolding techniques, and discipline-specific critical reading tasks, can help address these individual needs.

The integration of comprehensive skill-building approaches is another essential need, cited in four studies. Many students struggle with fragmented exposure to critical thinking skills, where short-term interventions fail to produce lasting improvements. Long-term, immersive approaches that embed critical thinking across subjects and learning levels can create a more sustainable impact. This includes integrating critical thinking across the curriculum, designing reading activities incorporating real-world applications, and encouraging interdisciplinary learning. Moreover, dialogic and collaborative methods, such as peer discussions, debates, and Socratic questioning, can cultivate more profound engagement with texts.

Lastly, three studies report the need for explicit instruction and scaffolding. Many students lack guidance in developing metacognitive strategies, such as self-monitoring



comprehension, questioning assumptions, and analyzing arguments systematically. Educators can help students gradually build their ability to engage with complex texts by incorporating step-by-step scaffolding techniques. For instance, structured exercises that move from identifying key arguments to evaluating biases and synthesizing multiple viewpoints can progressively enhance students' critical reading abilities.

In summary, the reviewed studies highlight several key interventions for improving critical reading skills. The most frequently cited need is the implementation of structured critical reading programs, ensuring systematic instruction in comprehension and analysis. Equally important is teacher training in critical thinking strategies, which equips educators with the tools to foster deep engagement with texts. The research also underscores the significance of explicit higher-order thinking instruction, student engagement strategies, and customized, context-sensitive teaching approaches. Additionally, comprehensive skill-building methods and scaffolding techniques are crucial in ensuring sustained critical reading development. Addressing these needs through well-designed interventions can significantly enhance students' ability to engage critically with texts, promoting deeper learning and analytical reasoning.

Recommendations

This study provides insights to help educators decide which issues to incorporate into their critical reading classrooms. The frequency of needs suggests that a comprehensive, multifaceted approach is necessary to improve critical reading skills. Structured programs, teacher training, and higher-order thinking instruction emerge as top priorities in addressing students' struggles. Student engagement strategies, customized instruction, and long-term skill integration are also crucial to sustaining improvements in critical reading ability. The findings are as follows:

- 1. Structured critical reading programs are essential for systematically developing students' analytical skills.
- 2. Teacher training in critical thinking pedagogy must shift from teacher-centered instruction to interactive, student-driven approaches.
- 3. Higher-order thinking skills must be explicitly taught, moving beyond memorization to analysis, synthesis, and evaluation.



- 4. Using interactive and problem-solving-based reading activities, student engagement must be prioritized.
- Cultural and contextual adaptation of teaching methods is required to address diverse learning needs.
- 6. A long-term, immersive approach to critical thinking instruction ensures sustained improvement rather than short-term interventions.
- 7. Explicit scaffolding techniques should be incorporated to help students develop metacognitive awareness in reading.

To effectively address the challenges in critical reading, structured and evidence-based strategies must be incorporated into teaching and curriculum design as follows:

- 1. Develop comprehensive critical reading curricula incorporating structured programs like DRTA, SQ5R, and dialogic teaching.
- 2. Provide teacher professional development programs to equip educators with the skills to implement interactive, higher-order thinking strategies.
- 3. Redesign reading activities to include debates, peer discussions, and real-world problem-solving tasks to encourage deeper engagement.
- 4. Use culturally responsive teaching strategies to encourage students from diverse backgrounds to participate in critical discussions.
- 5. Foster independent learning habits by incorporating self-regulated learning techniques that empower students to analyze, question, and evaluate texts.

By implementing these strategies, educators can bridge the gaps in critical reading skills, empowering students to become independent, analytical thinkers capable of engaging with texts at a deeper level.

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Developing Mathematics Teacher Educators' Pedagogical Content Knowledge through the Thailand Lesson Study incorporated Open Approach (TLSOA) model

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Abstract

The purpose of this qualitative research is to investigate the development of Mathematics Teacher Educators' Pedagogical Content Knowledge (PCK) on the implementation of Thailand Lesson Study incorporated Open Approach (TLSOA) model at demonstration primary schools in Lao PDR. The sample comprised 3 Mathematics Teacher Educators (MTEs) working in a Teacher Training College. They were selected through a purposive sampling method. The instruments consisted of field notes, lesson plans, and video recordings. The data was analyzed through content analysis. The findings revealed that most components of the MTEs' PCK were developed through the LS cycle as follows: in the step 1, The MTEs developed the ability to design problem situations that better connected with students' real-world experiences and previous knowledge. They were more capable of anticipating students' ideas and the difficulties that would arise in solving problems. Additionally, the MTEs were able to design media according to students' ideas. In the step 2, the MTEs developed the ability to present problem situations that engaged students in solving problems. They were able to prioritize students' ideas and ask meaningful questions to facilitate better discussions. In the step 3, The MTEs could explain students' ideas in each problem situation, recognize students' misconceptions about the mathematical content, and reflect on designing lesson plans and teaching with an emphasis on students' thinking and problem-solving



processes. By conducting LS practice, MTEs were able to deeper understand the mathematics curriculum and textbook of primary school, and they have learned more about students' learning and environment of primary school class room. They discovered the benefits of collaboration for the success of their lessons.

Keyword: Lesson Study, Open Approach, Pedagogical Content Knowledge.

Introduction

Teacher educators are the ones mostly involved in developing the quality of teachers. (Cochran-Smith, 2005). Currently, studies focusing on mathematics education get paid more attention to the study on the teacher educators' knowledge, aiming to understand its development, and how it is reflected in the practice of teaching (Biza et al., 2007). Reflection and analysis of one's own practices constitute an important part of professional development (PD) experiences for teacher educators (Loughran, Berry, & Mulhall, 2012) recommended that teacher educators go back to teaching in K-12 schools every few years in order to renew their teaching experience as part of their PD. In addition, Lesson study (LS) is a PD practice that appeals to educators longing to collaborate with their peers in meaningful ways to improve their own practice (Stepanek, 2001).

Education development in Lao PDR is crucial for human resource development, aligning with national socio-economic goals and the 2030 Sustainable Development Goals, particularly SDG4 on Education (ESSDP 2021-25). Improving teachers' competency is a key issue. The Teacher and Personnel Development Strategy for Education and Sports (TPDSES) aims to ensure continuous and systematic upgrading of teachers' knowledge and teaching methodologies by 2025 (MoESb, 2020). However, the 2016 school autonomy study revealed that primary teachers had poor content knowledge and low pedagogical skills in mathematics, impacting student learning (World Bank 2016). Education and Sports Sector Development Plan 2021-2025 (ESSDP 2021-25) indicates that Teacher Training Colleges (TTCs) will serve as professional development centers for pre-service and in-service training. Yet, the Teacher Training College Training Needs Analysis (TNA) showed that many TTC lecturers lack primary classroom experience and knowledge of child development and learning (BEQUAL, 2016). MoES Research Institute for Educational Science (RIES)'s survey report on primary school student achievement (ASLO III 2012) showed



that primary school students had a very low level of learning ability in mathematics compared to Lao language and science subjects, and TNA report indicated that teacher education is implicated in these poor learning outcomes. The most important implication of the TNA findings is that the TTC Professional Development Program (PDP) must be school-based and focus on the realities of the primary classroom, The PDP should strengthen the interface between TTCs and schools by working together through LS (BEQUAL, 2016).

Lesson Study was originally developed in Japan, Japanese LS is a practice-based, provides a collaborative model for sustainable professional development (Murata, 2011). LS is a professional development activity that has been used in Japan to improve the instruction of mathematics and science (Fernandez & Yoshida, 2004), and improving students' learning (Perry and Lewis 2011). It involves teachers working together to set goals, implement "research lessons," and refine them through observation and discussion (Lewis, 2002). In the last few decades, LS has been introduced in mathematics teacher education (Suh and Fulginiti, 2012). In addition, LS is used in both pre-service and in-service teacher training and in various educational contexts (Shimizu, 1999; Shimizu, 2002). Teachers at university-attached laboratory school that have a mission to develop a new teaching approach often use their lesson study meeting for demonstrating an approach or new teaching materials they developed (Lewis and Takahashi 2013).

Since LS is culturally rooted in Japan, uncritically transferring it to non-Japanese contexts can cause problems (Ebaeguin & Stephens, 2014). Studies show that practicing LS outside Japan can lead to misconceptions and issues of cultural compatibility, resulting in varying success (Stigler & Hiebert, 2016). Some key components are not easily transferable (Cheung & Wong, 2014; Fujii, 2014).

The Japanese mathematics teaching approach, known as "structured problem solving," encourages students to find their own solutions (Stigler & Hiebert, 1999). Fujii (2017) calls this "teaching mathematics through problem solving," focusing on multiple solutions and processes. Similar methods include the "open-approach method" (Nohda, 2000) and the "open-ended approach" (Becker & Shimada, 1997). These approaches emphasize understanding students' thinking, encouraging discussions, and mathematically elaborating activities. Students start with



an "incomplete problem" and explore solutions through their prior knowledge and mathematical thinking (Becker & Shimada, 1997).

In Japan, problem solving has been refined through LS for many decades. Therefore, Japanese teachers have a set of problems that have already been well tested and included such key new mathematical concept within a textbook in a series of lessons. This collection of student mathematical thinking in the shared book allows teachers to share knowledge related to student thinking in each mathematics problem. As a result, teachers have a well-articulated set of instructional practices (Takahashi et al., 2013). Therefore, to intertwine these two approaches and overcome the challenge effectively, teachers should be knowledgeable in LS, problem-solving approach and must know the relevant mathematics well enough to grasp student solution methods in real time and to recognize whether and how they relate to the key mathematical points that need to be learned (Takahashi et al., 2013).

LS was introduced to Laos in 2004 by the Japanese International Cooperation Agency (JICA) through the "Improving Science and Mathematics Teacher Training (SMATT)" project (Saito, 2007). In 2015, LS was included in the 2016-2020 Teacher Education Development Plan by the Ministry of Education and Sports (MoES) to establish professional networks and school-based training (MoES, 2017). In 2018, LS was further introduced through the "Training of Trainers (ToT) Workshop" to deepen TTC educators' understanding of reflective practice and LS. After the workshop, TTC educators observed lessons in primary schools to identify problems, conduct LS, and gain teaching experience (BEQUAL, 2016).

Shulman (1986) defined PCK as the integration of pedagogy and content knowledge, The two main components that distinguished in were, the most useful forms of representing the topics in one's subject area and, an understanding of what makes the learning of these topics easy or difficult for students. Shulman (1986) considered other categories in teachers' knowledge base, content knowledge (CK), general pedagogical knowledge (PK), curriculum knowledge, knowledge of learners and their characteristics, knowledge of educational contexts, and knowledge of educational ends, purposes, and values.

Laos has implemented LS for almost 20 years, with strong support from the Ministry of Education and Sports (MoES, 2015). However, LS in Laos remains in its "initial stage of learning how to use lesson study as a professional development activity" (Shingphachanh, 2018). The study



of Shingphachanh (2018) also found that a lot of issues hindered the effectiveness of the lesson study in Laos. These issues included lack of analysis of the main mathematical content, and lack of analysis of the connection of the curriculum. However, there is not a large body of research on teacher educators, and this fact is echoed in the research literature, (Chapman, 2008). Thus, conducting further research on LS in teacher education in Laos is important. In addition, research on LS as a vehicle for development of mathematics teacher educators' Pedagogical Content Knowledge is scarce, not only in Laos, but all around the world.

Research Objectives

This research consisted of one objective: to investigate the development of Mathematics Teacher Educators' Pedagogical Content Knowledge (PCK) on the implementation of TLSOA at demonstration primary schools in Lao PDR.

Research Methodology

1. Samples

The samples consisted of 3 Mathematics Teacher Educators (MTEs) selected from a total population of 12 MTEs at Savannakhet Teacher Training College. The samples were purposively chosen for the following reasons: 1) they were personally interested in conducting Lesson Study in primary schools, and 2) they had already been trained on how to conduct Lesson Study.

2. Research Instruments

The research instruments consisted of field note, lesson plans and the video-tape recording; the qualitative data was analyzed through content analysis.

3. Data Collection

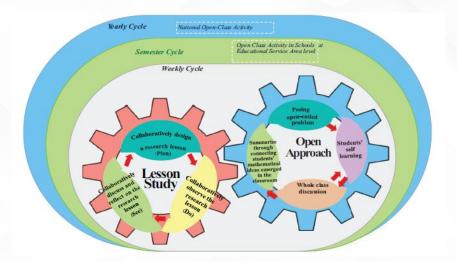
The classroom context of the Lao PDR is culturally similar to the context of Thailand. Therefore, the researcher is interested in applying the Thailand LS incorporated Open Approach (TLSOA) model (Inprasitha, 2022) in this study, The stages of data collection were conduct through three steps weekly cycle TLSOA model shown in Figure 1. Such as: step 1, collaboratively design a research lesson (Plan), step 2, collaboratively observe the research lessons (Do), step 3, collaboratively discuss and reflect on research lessons (See). For Open Approach, there are four phases, namely: 1) posing an open-ended problem, 2) students'self learning, 3)



whole class discussion and comparison, and 4) summing up by connecting students 'emerging mathematical ideas.

Figure1

TLSOA model (Inprasitha, 2022)



During data collection, researchers conducted participatory observations by collaborating with the lesson study team in 3 steps:

- 1. Collected data during the collaboration in designing the research lesson: collaborated in designing problem situations, anticipating students' ideas and their difficulties in solving problems, discussing the lesson objective, and designing teaching aids, which resulted in 6 lesson plans for grade 5 on the topic of angles.
- 2. Collaborated in observing the classroom, recording the students' ideas, whole-class discussions, and connections for concluding mathematical ideas.
- 3. Collaborated in reflecting on students' ideas, associations of ideas, students' thinking, problem-solving processes, developing lesson plans, and evaluating the appropriateness of problem situations and teaching aids.
 - Field notes: Researchers collected the lesson study team's field notes from all 3 steps.
 - Lesson plans: Researchers collected the lesson plans designed in step 1.
- Video recordings: Researchers recorded videos of the lesson study team's work during all 3 steps.



The PCK components that will be described in this study consist of Content knowledge (CK) and Pedagogical Knowledge (PK). 1) CK includes (1) mastery of mathematical concepts, (2) anticipate students' ideas and students' misconception. 2) PK includes: (1) create and post mathematical problem situation, (2) design and use media according to students' ideas, (3) anticipate students' difficulties.

4. Data Analysis

This study used descriptive analysis to understand the planning process by Mathematics Teacher Educators (MTEs). By analyzing classroom conversations during Lesson Study, the researchers identified key dialogues that led to consensus on lesson plan design. Thematic analysis was performed on lesson plan conversations, coded with Keyword, and examined post-teaching reflections. The data from lesson plans were compared with recorded discussions among MTEs during planning, teaching, and reflections. This emphasized speeches explaining various events. MTEs' Pedagogical Content Knowledge was analyzed through the Lesson Study process using field notes, lesson plans, and videotape recordings. The data were analyzed based on the research's conceptual framework.

Research Results

The development of Mathematics Teacher Educators' Pedagogical Content Knowledge in each steps of the lesson study cycle as follows:

1. The Step 1: Collaboratively design a research lesson (Plan)

The MTEs collaborated in planning lesson plans regularly every week, based on the 4 phases of the open approach framework as the teaching method of problem-solving as shown in Figure 2. Consequently, the lesson study team developed knowledge due to:



Figure2 Collaboratively design research lesson



- -MTEs discussed for create problem situations from real-world contexts of students as can be seen in the following protocol
 - Item 1 MTE 3: Can we establish which of these animals has the largest angle mouth size and then give the order of mouth size from smallest to largest?
 - Item 2 MTE 1: If Analyzing the answers, students might answer hippo' mouth or crocodile' mouth, because these animals are big and their food is also big. This might not align with the objective of the activity...
 - Item 3 MTE 2: According to the textbook, it should be like this. Observe the animals 'mouth from pictures A to E: 1. Which animal in the pictures has the widest mouth? 2. Which animal in the pictures has the narrowest mouth?
 - Item 4 MTE 1: Try inserting one question after the second question like this: 'Have the students explain the method of comparing the mouth sizes of each animal. This will prompt the students to explain the comparison method...
- -MTEs discussed for anticipate students' ideas, students' misconception, students' difficulties and connections of students' previous concepts, as can be seen in the following protocol



- Item 1 MTE 3: ...Students will choose the hippo's mouth, because, in general, from the pictures, they will see that the hippo's mouth appears wider than the others. However, it is the angle of snake's mouth is largest...
- Item 2 MTE 1: Students might answer that the angle of crocodile's mouth is the narrowest, if they rely on their experience from lesson 1, where they identified the sharpest angle of a triangle ruler. This is because the angle of crocodile's mouth is similar to the sharpest angle of the triangle ruler.
- Item 3 MTE 3: Students might find it difficult to use the angles of a triangle ruler to compare the angle of animals' mouth, because they haven't learned about angles yet...
- Item 4 MTE 2: If they use the 45-degree and 60-degree angles of a right triangle ruler, it might be difficult because they are wider than the angles of the crocodile's and lion's mouths.
- -MTEs discussed for creating or designing teaching aids to relate to problem situation. as can be seen in the following protocol
 - Item 1 MTE 2: ...The pictures of various animals in the textbook should be essential teaching aids, because these animal pictures are included in the problem situation we have designed...
 - Item 2 MTE 1: Activity sheets should also be primary teaching aids. The right-angle triangle ruler that they learned in lesson 1 also can be, and thin paper...

2. The Step 2: Collaboratively observe the research lessons (Do)

- MTE pose problem situations to engage students to solve the problems, as can be seen in the following protocol:
 - Item 1 MTE 1: Today the teacher has pictures of animals for us to see, and whether you have seen these animals before. Are there any others?...
 - Item 2 MTE 1:...Task 3, do you know what the problem wants you to do? Explain the method used for comparison. Task 4 is to indicate the order of the size mouth angle from narrow to wide. Then, how can we apply the previous lesson to solve these problems?



- -MTE raise points for better discussion to make students aware of the tools (How-to) obtained by oneself, as can be seen in the following protocol:
 - Item 1 MTE 1: ...If our group uses the observation method, how do we know which one is the widest and which one is the narrowest?
 - Item 2 ST 2: We observed the upper and lower edges of the mouth and saw that the hippo's mouth is the widest and the crocodile's mouth is the narrowest...
 - Item 1 MTE 1: How did our group come up with these numbers...and how do we know which one is wide and which one is narrow?

4.3. The Step 3: collaboratively discuss and reflect on research lessons (See)

MTEs reflected 4 point from step 1 and step 2 of lesson study cycle as shown in Figure 3 including:

Reflecting on post problem situation to engage student doing problem-solving

"I try to connect problem situation to the real world of the students by asking them about their real experiences of going to the zoo, then, gradually introducing the problem situation by discussing what the animals in the pictures are doing. Then post problem situation."

Figure3

Collaboratively discuss and reflect on research lessons (See)





- "The students' ideas and students' misconception

 "The students' ideas that emerged were as predicted by our team, such as some students choosing the hippo's mouth as the widest and the lion's mouth as the narrowest. For the comparison method, student able to come up with three methods: observation, using a ruler to measure the animal's mouth, and using thin paper for comparison."
- "Students might still not understand task 3. It appears that group 4 and group 2 did not explain their comparison methods. ...Students are still unable to write explanations and reasons for their comparisons. In teaching mathematics, we often focus on calculations. This might be why they cannot write explanations..."
- Reflecting on develop mathematic problem situation be better for student to understand "Revise the word 'opening the mouth' with 'mouth angles'. Task 3 will become "Have students explained the method in comparing the size of animals' mouth angles."

Discussion

Through the implementation of LS with primary school teachers, MTEs have developed ability to anticipate students' ideas, including misconceptions and difficulties in problem-solving. They have enhanced their curriculum knowledge by continuously studying elementary school textbooks. As a result, they can better connect the lessons with students' previous knowledge. This consistent with Lott's study, which found that the LS process helps improve teachers' ability to teach mathematics, enhancing their understanding of student knowledge and curriculum knowledge (Lott, 2006). Through the process of reflection, emphasis was placed on the students' thought processes rather than the teaching of the teacher. Adjusting problem situation to make them clearer, the difficulties and misunderstandings in the students' problem-solving process were addressed. Reflection process in LS have developed MTEs' Pedagogical Content Knowledge similar to the study of Mitcheltree (2006), which found the reflection process in LS plays a significant role in enhancing teachers' Pedagogical Content Knowledge.



Conclusion

Most components of the Pedagogical Content Knowledge (PCK) of Mathematics Teacher Educators (MTEs) were developed through the cycle of Lesson Study (LS) as follows: Step 1: Collaboratively designing research lessons (Plan), MTEs were able to create real-world problem situations involving drawing, measuring, and finding angles to engage students. They could anticipate students' ideas, previous knowledge, misconceptions, and difficulties that might arise during problem-solving. Additionally, the LS group was able to design media according to students' ideas. Step 2: Collaboratively observing research lessons (Do), MTEs posed challenging problem situations to engage students in solving problems and responded appropriately to students' thinking. They were aware of students' concepts and misunderstandings about the mathematical content. Step 3: Collaboratively reflecting on teaching practice (See), The LS group developed better mathematical problem situations for students to understand and engage in solving problems. They could explain students' ideas in each problem situation, understand students' reasoning, and reflect on areas for improvement for further development.

Recommendations

Based on the findings, MTEs have developed pedagogical content knowledge and teaching through conducting LS in primary schools. Additionally, MTEs have enhanced their curriculum knowledge by continuously studying primary school textbooks. They are better able to connect the lessons they will teach with students' prior knowledge. They have also developed knowledge of student from observing and teaching in actual primary school class room. This knowledge will be beneficial for teaching management at the teacher education level. Innovations have become a bridge connecting school and university curricula; connect school and university learning management. MTEs that teaching at the higher education level should observe or teach in primary school classrooms, to get more teaching experience in primary school and grain the knowledge of student, developed curriculum knowledge and pedagogical content knowledge.



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Sustainable Leadership Practices among Secondary Resource School Directors in Cambodia

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Abstract

The aim of this paper is to investigate the level of practicing sustainable leadership and its dimensions among Secondary Resource School (SRS) directors throughout Cambodia based on teachers' perception. It also explores the nature of the similarities and differences in estimating the practice level of sustainable leadership among SRS directors in Cambodia based on the teachers' demographic information (gender, qualification, teaching experience). The descriptive survey method was adopted in this paper, and a questionnaire was developed and designed based on Hargreaves and Fink's Sustainable Leadership Model (2003). In line with the dimensional reliability coefficient, the reliability coefficient is high at 0.98, indicating that the questionnaire has a high degree of dependability that can be trusted for the study's field application. The samples of the study consisted of 453 teaching staff who are administering and teaching grades 7 through 12, derived through 10 % from a whole teaching staff by each province, and simple random sampling by drawing lots from the sample frame. The collected data were analyzed by using descriptive and inferential statistics via SPSS. The findings revealed that the level of sustainable leadership practice among SRS directors in Cambodia was high. It was also found that there were statistically significant differences in terms of teachers' demographic data. Based on the findings, this paper made a number of recommendations, including expanding the number of training programs.

Keyword: Sustainable leadership, Secondary Resource School, School Director



Introduction

Particularly in the contemporary day, leadership is a crucial pillar and axis to which many sectors are entrusted. Leaders have always played a crucial role in bringing about significant and constructive change for the societal renaissance. To meet the criteria, grow and revitalize the country, and realize the ambitious vision, a different kind of leadership has been needed in light of the 2050 vision and the significant advancements in science (Mok, 2014; Hang, 2017; Royal Government of Cambodia – RGC, 2022; Lim, 2023; Ministry of Education, Youth and Sport – MoEYS, 2024).

Since education is the foundation for building societies and peoples, developing countries seeking progress and development must place a high value on education. They must pay attention to those in charge of managing educational systems and those who carry out the educational process, as well as methods and practices to enhance and improve the results (RGC, 2022, MoEYS, 2024). This is because the rapid changes that Cambodia is experiencing in a number of economic, social, environmental, and technological fields affect and create challenges for educational institutions, necessitating adaptation to ensure survival and continuity (RGC, 2022; Lim, 2023). Additionally, there is an issue with the quality of leaders in the education sector, which may be attributed to a number of factors, including expanding student abilities, limited school budget, and increased work pressure (Mok, 2014; Lim, 2023; Choeung, Mok, Lim, 2024).

The term "sustainable leadership" describes actions, procedures, and frameworks that generate long-term benefits for investors, the environment, future generations, and society as a whole. According to Hang (2017), this idea requires organizations to alter their operations and processes in order to make them more sustainable. This is done in order to preserve their natural, human, and material resources. In order to improve the present and the future, it focuses on finding solutions to organizational, social, and economic problems as well as on how to influence and motivate employees and society by incorporating sustainable knowledge into its principles without ignoring the past (Zulkiffli & Latifi, 2016; Choeung, Mok, Lim, 2024). The findings of numerous Cambodian studies, such as the Lim study (2023), also supported the idea that the use of traditional leadership styles is out of step with the evolution of the educational process in light of global changes. The study revealed a weakness in the teachers' ability to participate in decision-making and interact with the rapidly changing external environment.



Because of its significance and ability to transform and improve organizations, studies like Lambert (2011) and Conway (2015) have confirmed the importance of sustainable leadership as a leadership style that focuses on the development of leaders and educational staff. According to Cook's (2014) research, sustainable leadership is crucial for sustaining both teachers' and students' academic and professional development. The study by Lim (2023) emphasizes the need for a sustainable strategy to improve schools and that sustainable leadership aims to improve the educational process. Additionally, the study by Choeung, Mok and Lim (2024) indicates the importance of the practice of school leadership by education directors in Cambodia.

The significance of sustainable leadership in educational institutions is evident from the aforementioned. When examining the educational institutions, it sees that the answers offered are short-term and only address a certain issue for a limited period of time. Together with long-term planning and the future vision, sustainable leadership also contributes to the development of stronger bonds and a sense of teamwork. It might make a big difference in raising the standard of instruction and learning in schools and other educational institutions. For this reason, the current paper was conducted to close the scientific gap in this area and aid in the growth of school administrators.

Research Objectives

The objectives of this paper were twofold:

- 1. To explore the practice level of sustainable leadership among SRS directors in Cambodia based on the teachers' perceptions.
- 2. To find out the similarities and differences in estimating the practice level of sustainable leadership among SRS directors in Cambodia based on the teachers' demographic data (gender, qualification, teaching experience).

Research Questions

Based on research objectives above, the following research question are formulated:

1. What is the degree of sustainable leadership practice among SRS directors in Cambodia based on the teachers' perceptions?



2. Are there statistically significant differences in estimating the degree of sustainable leadership practice among SRS directors in Cambodia based on the teachers' demographic dtata (gender, qualification, teaching experience)?

Research Methodology

1. Targeted Population and Samples

This paper used the descriptive survey method, for its relevance to the nature of the study, as it is the best method to know the degree of sustainable leadership practice among SRS directors in Cambodia. All SRS teaching staff throughout Cambodia are the population of this study. As of 2024 there are a totally 50 SRSs with 4,524 teaching staff. As a result, the target population are all teachers who are teaching at grades 7, 8, 9, 10, 11, and 12 in the SRSs. The samples of the study consisted of 453 teaching staff who are administering and teaching grades 7 through 12, derived through 10 % from a whole teaching staff by each province, and simple random sampling by drawing lots from the sample frame.

2. Research Instrument

This paper employed the questionnaire as the research instrument for data collection, after reviewing the literature and previous studies. This is due to its relevance to the study's objectives, methodology, and society, and to answer its questions. The questionnaire was constructed, it consisted of thirty-one items, which were divided into seven dimensions; namely: (1) Education and Sustainable Learning (6 items); (2) Leadership Sustainability (Job Succession) (4 items); (3) Leading Others (Distributed Leadership) (3 items); (4) Societal Justice (5 items); (5) Diversity (4 items); (6) Conservation of Human and Material Resources (5 items); and (7) Learning from the Past (4 items). Also, the questionnaire was presented to experts in order to identify its face validity and to ensure that it measures what it was designed to measure. To ensure the Reliability of the questionnaire, the reliability coefficient of Cronbach's Alpha (α) was calculated as follows:



Table 1:

The Reliability of the Questionnaire Used in the Study

No.	Questionnaire Dimension	No. Item	Reliability
1.	Education and Sustainable Learning (ESL)	6	0.92
2.	Leadership Sustainability (Job Succession) (LES-JS)	4	0.92
3.	Leading Others (Distributed Leadership) (LEO-DL)	3	0.86
4.	Societal Justice (SOJ)	5	0.94
5.	Diversity (DIV)	4	0.93
6	Conservation of Human and Material Resources (CHM)	5	0.95
7.	Learning from the Past (LEP)	4	0.94
	Total	31	0.98

3. Data Collection Procedures

Upon receipt of approval from the Ministry of Education, Youth and Sport, a research site request letter was sent to all Provincial Office of Education, Youth and Sport for issuing the permission and facilitation on conducting research. This letter requested site approval as well as informing each SRS directors the purpose of this study. After obtaining permission from them, they sent a research announcement to the targeted schools. The research announcement explains this study and provides the surveyed samples with an opportunity to review this study's intent. Samples read and signed the informed consent forms. In addition, the researcher answered questions from the participants pertaining to this study. All targeted SRS teachers returned the questionnaire (100%).

4. Data Analysis and Statistical Procedures

All collected data were analyzed by using the descriptive statistics (percentage, frequency, mean, standard deviation) and inferential statistics (t-test for Independent Samples, One-way ANOVA, Pearson's product-moment correlation coefficient) through the SPSS software.



Research Results and Discussion

1. Practicing Level of Sustainable Leadership among SRS Directors

To determine the practicing level of sustainable leadership among SRS directors based on teachers' perception in Cambodia, the arithmetic mean and standard deviation of its dimensions and the rank of each dimension were calculated.

Table 2

Mean, Standard Deviation and Rank of Each Sustainable Leadership (n=453)

Questionnaire Dimension	on M	S.D.	Rank
ESL	4.35	0.70	2
LES-JS	4.12	0.90	6
LEO-DL	3.95	0.97	7
SOJ	4.29	0.81	3
DIV	4.36	0.73	1
CHM)	4.27	0.85	4
LEP)	4.20	0.83	5
	Total 4.22	0.76	High
	ESL LES-JS LEO-DL SOJ DIV CHM)	ESL 4.35 LES-JS 4.12 LEO-DL 3.95 SOJ 4.29 DIV 4.36 CHM) 4.27 LEP) 4.20	ESL 4.35 0.70 LES-JS 4.12 0.90 LEO-DL 3.95 0.97 SOJ 4.29 0.81 DIV 4.36 0.73 CHM) 4.27 0.85 LEP) 4.20 0.83

As revealed in Table 2 above, the finding indicates that practicing level of sustainable leadership among SRS directors based on teachers' perception in Cambodia with mean of 4.22 out of 5 degrees which falls in the first category of the five-point Likert scale, which indicates very high. This practice of sustainable leadership was addressed through seven dimensions, five of which came with arithmetic means indicating a very high degree of practice. This finding attribute this to the awareness of the Ministry of Education, Youth and Sport (MoEYS) about improving the environment and its educational institutions in addition to its outputs.

The MoEYS is working to achieve its vision of building a knowledge society, it launched a number of initiatives related to sustainable development, this agrees with the study of Lim's (2023), which dealt with the degree to which education directors in Cambodia practice leadership style and ways to develop it, which stated that the relative weight of the practice patterns of leadership reached (90.2%), and Mok's study (2014), which dealt with sustainable leadership in an



elementary school, confirmed that the school leader achieved leadership practices by organizing efforts and integrating various resources to achieve common goals. It has also realized that it has maintained leadership through the leadership development movement (Mok & Khim, 2024). The participating teachers noted that sustainable leadership is achieved through communication and cooperation in an atmosphere of trust and appreciation at the individual and collective levels, and the study of Kantaputra and Saratun (2013), which dealt with the reality of sustainable leadership practices at the oldest university in Thailand, and its results showed that most sustainable leadership practices were achieved.

As opposed to the findings of the Al-Ardan study (2020), which concluded that academic leaders' performance in light of sustainable leadership reached a medium level, and the Al-Rashidi and Al-Azmi study (2016), which assessed school principals' leadership practices in the State of Kuwait with an arithmetic mean of (2.63), which found that the leadership practices of school principals were at a medium level.

2. Similarities and Differences of Sustainable Leadership Practices by Teachers' Demographic Data

To identify whether there were statistically significant differences in the study items responses according to the different gender type, the t-test was used. In order to show the significance of the differences in the study items responses according to the difference in gender, and the results came as illustrated in Table 3.

Table 3
Similarities and Differences of Sustainable Leadership Practices by Gender (n=453)

Dimension	Gender	No.	M	S.D.	t	df	p-value
1 EGI	Male	345	4.38	0.65	2 (21	210	0.000
1. ESL	Female	108	3.95	1.23	2.621	319	0.009
2 1 50 10	Male	345	4.16	0.85	2.269	210	0.001
2. LES-JS	Female	108	3.46	1.29	3.368	319	0.001
2 LEO DI	Male	345	3.99	0.92	2.601	210	0.007
3. LEO-DL	Female	108	3.38	1.46	2.691	319	0.007



Gender	No.	M	S.D.	t	df	p-value
Male	345	4.34	0.77	2.717	210	0.000
Female	108	3.64	1.11	- 3.717	319	0.000
Male	345	4.39	0.71	- 2.384	210	0.010
Female	108	3.98	0.98		319	0.018
Male	345	4.30	0.79	2.760	210	0.006
Female	108	3.75	1.39	2./08	319	0.006
Male	345	4.24	0.79	2.506	210	0.012
Female	108	3.75	1.31	2.306	319	0.013
Male	345	4.28	0.71	2 100	210	0.002
Female	108	3.73	1.18	3.108	319	0.002
	Male Female Male Female Male Female Male Male Male Female	Male 345 Female 108 Male 345 Female 108 Male 345 Female 108 Male 345 Female 108 Male 345 Male 345	Male 345 4.34 Female 108 3.64 Male 345 4.39 Female 108 3.98 Male 345 4.30 Female 108 3.75 Male 345 4.24 Female 108 3.75 Male 345 4.28	Male 345 4.34 0.77 Female 108 3.64 1.11 Male 345 4.39 0.71 Female 108 3.98 0.98 Male 345 4.30 0.79 Female 108 3.75 1.39 Male 345 4.24 0.79 Female 108 3.75 1.31 Male 345 4.28 0.71	Male 345 4.34 0.77 Female 108 3.64 1.11 Male 345 4.39 0.71 Female 108 3.98 0.98 Male 345 4.30 0.79 Female 108 3.75 1.39 Male 345 4.24 0.79 Female 108 3.75 1.31 Male 345 4.28 0.71 Male 345 4.28 0.71 3.108	Male 345 4.34 0.77 Female 108 3.64 1.11 Male 345 4.39 0.71 Female 108 3.98 0.98 Male 345 4.30 0.79 Female 108 3.75 1.39 Male 345 4.24 0.79 Female 108 3.75 1.31 Male 345 4.28 0.71 Male 345 4.28 0.71 3.108 319

There are statistically significant differences at the level of 0.05 and less in the study items trends regarding the degree of sustainable leadership practice among SRS directors from the perspective of the teachers according to gender for all dimensions and for the axis as a whole, as is evident from the results displayed in Table 3. The direction of differences for all dimensions and the dimensions as a whole was for male versus female SRS teachers. This may be explained by the diverse methods and objectives that male SRS teachers pursue, as well as the manner in which they use both people and material resources (Choeung, Mok, Lim, 2024).

Table 4
Similarities and Differences of Sustainable Leadership Practices by Qualification (n=453)

Dimension	Gender	No.	M	S.D.	t	df	p-value
1 ECI	Lower & BA	321	4.38	0.68	2 202	210	0.001
1. ESL	Higher BA	132	3.66	0.79	3.393	319	0.001
	Lower & BA	321	4.15	0.89	2.522	210	0.012
2. LES-JS	Higher BA	132	3.45	1.29	2.533	319	
2 LEO DI	Lower & BA	321	3.99	0.95	2.040	210	0.005
3. LEO-DL	Higher BA	132	3.15	1.09	2.848	319	0.005

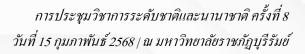


Dimension	Gender	No.	M	S.D.	t	df	p-value
4 COI	Lower & BA	321	4.33	0.79	2.729	210	0.000
4. SOJ	Higher BA	132	3.41	0.94	3.738	319	0.000
5 DIV	Lower & BA	321	4.39	0.71	2 447	319	0.01
5. DIV	Higher BA	132	3.63	0.92	3.447		0.01
6 CHM	Lower & BA	321	4.30	0.83	2.010	319	0.002
6. CHM	Higher BA	132	3.52	1.00	3.010		0.003
7 LED	Lower & BA	321	4.23	0.83	2.422	210	0.016
7. LEP	Higher BA	132	3.61	0.80	2.433	319	0.016
Total	Lower & BA	321	4.27	0.74	2 207	210	0.001
	Higher BA	132	3.51	0.88	3.307	319	0.001

The findings presented in Table 4 make it evident that there are statistically significant differences at the level of 0.05 and less in the study items trends regarding the degree of sustainable leadership practice among SRS directors in Cambodia from the perspective of the teachers in accordance with the qualification variable for all dimensions and for the dimension as a whole, as if the direction of differences for all dimensions leads to a bachelor's degree or less.

Table 5
Similarities and Differences of Sustainable Leadership Practices by Teaching Experience (n=453)

Teaching Experience	df	SS	MS	F	p-value
1. ESL					
Between Group	2	5.959	2.979	C 21044	0.002
Between Group	318	152.565	0.480	6.210**	0.002
Total	320	158.524			
2. LES-JS					
Between Group	2	7.581	3.790	4.75144	0.000
Between Group	318	253.683	0.798	4.751**	0.009
Total	320	261.264			





Teaching Experience	df	SS	MS	F	p-value
3. LEO-DL					
Between Group	2	11.547	5.773	(22.4**	0.002
Between Group	318	289.868	0.912	6.334**	0.002
Total	320	301.415			
4. SOJ					
Between Group	2	8.444	4.222		
Between Group	318	204.282	0.642		
Total	320	212.726		6.572**	0.002
5. DIV					
Between Group	2	2.248	1.124	2 104	0.124
Between Group	318	169.891	0.534	2.104	0.124
Total	320	172.139			
6. CHM					
Between Group	2	4.034	2.017	2 010	0.061
Between Group	318	227.641	0.716	2.818	0.061
Total	320	231.675			
7. LEP					
Between Group	2	4.516	2.258	2 250*	0.040
Between Group	318	220.947	0.695	3.250*	0.040
Total	320	225.463			
Total					
Between Group	2	5.757	2.879	5 074**	0.007
Between Group	318	180.415	0.567	5.074**	0.007
Total	320	186.172			

^{*} significant at a level of 0.05 or less

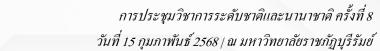
^{**} significant at a level of 0.01 or less



Table 5 shows that there are statistically significant differences at the level of 0.05 and less in the study items trends regarding the degree of sustainable leadership practice among SRS directors from the perspective of the teachers according to the variable of teaching experience for all dimensions and for the dimensions as a whole, with the exception of the dimension no. 5 - DIV, and the dimension no. 6 - CHM, where the significance level for them was greater than the significance level 0.05. Scheffe's post-test was used to determine the direction of the hypotheses, and the trend for years of experience was from 5 years or more. In contrast to the findings of Younes's (2017) study, which found no statistically significant differences in the degree of practice due to the study's variables — gender, academic qualification, and years of service — Ishtiwi's (2017) study also found no statistically significant differences attributable to any of the variables of job title, academic qualification, and years of experience in the arithmetic mean of the research sample members' estimation of the extent to which education directors in the research population practice sustainable leadership patterns. Lim's (2023) study also found no statistically significant differences.

Table 6Pearson Correlation Coefficients for the Items of All Dimensions (n=453)

No.	Dimension and Item	Correlation
		Coeficient
1. ES	L	
1.	The school's vision includes a commitment to continuous education and	
	learning.	0.708**
2.	The leader encourages teachers to develop higher-order thinking skills for	
	students.	0.901**
3.	The director encourages the teachers to develop the skills of self-learning	
	among the students.	0.899**
4.	The leader instructs the teachers to use the various evaluation methods.	0.904**
5.	The leader suggests references and scientific resources to enhance the	
	educational curricula in teaching.	0.863**





No.	Dimension and Item	Coeficient
6.	The director seeks to develop and improve the professional growth of	
	teachers.	0.843**
2. LE	S-JS	
1.	The director plans leadership succession by imparting expertise to agents	
	and teachers.	0.897**
2.	The director works to prepare female leaders who can take responsibility.	0.929**
3.	The director contributes to training teachers to practice leadership skills.	0.945**
4.	The director provides the teachers with feedback to improve their	
	performance.	0.852**
3. LE	O-DL	
1.	The director delegates some of her powers to the teachers to exercise	
	leadership tasks.	0.859**
2.	The director cares about everyone's participation in the decision-making	
	process.	0.928**
3.	The director trusts the teachers' ability to carry out their responsibilities	
	efficiently	0.880**
4. JO	S	
1.	When implementing organizational measures, the director maintains good	
	relations with the local community.	0.920**
2.	The director puts the public interest ahead of the private interest.	0.914**
3.	School leadership contributes to solving societal problems.	0.883**
4.	The director instills the principle of fairness in the educational	
	environment.	0.918**
5.	The director promotes among her employees the value of social	
	responsibility.	0.908**
5. DI	V	
1.	School leadership benefits from local resources to support learning and	
	schooling.	0.900**



No.	Dimension and Item	Correlation
		Coeficient
2.	The director supports interactive communication between the school and	
	the family.	0.925**
3.	The director promotes creativity and innovations in education and	
	teaching methods according to the multiple types of intelligence.	0.921**
4.	The director supports professional learning communities.	0.904**
6. CF	HM	
1.	The director encourages the teachers to work together towards achieving	
	the set goals.	0.866**
2.	The director considers the capabilities of the teachers while assigning	
	them tasks.	0.935**
3.	The director appreciates the efforts of the teachers and commends them.	0.925**
4.	The director provides a suitable work environment for teachers according	
	to their needs.	0.944**
5.	The director is keen to make optimum use of the available resources.	0.913**
7. LE	SP .	
1.	The director works on archiving information and data within a technical	
	program to benefit from them at any time.	0.894**
2.	The director seeks information through feedback to improve work	
	processes.	0.948**
3.	The director encourages teachers to use the results of previous decisions	
	in solving current problems.	0.949**
4.	The director seeks to benefit from the experiences of other schools in	
	improving teaching methods.	0.910**

^{**} significant at a level of 0.01 or less



The aforementioned makes it evident that each item's correlation coefficient with its dimension has a positive value and is statistically significant at the significance level (0.05) or lower; the values ranged from 0.708 to 0.949. This shows that the questionnaire statements and their dimensions are internally consistent and that they are valid for measuring the things they were designed to measure.

Conclusion

Establishing and maintaining a transparent, school culture that is supported by effective communication. The main factor influencing sustainable leadership will be the institutional strategy used to instill a sustainable leadership culture. All of the studies and literature agree that changing the institutional culture will take time. On the other hand, SRS directors have a significant impact on and influence the culture. For both short-term and long-term objectives, school leaders must establish transparency, direction, and vision. It is critical to communicate openly and regularly.

It is recommended that leaders use a combination of formal and informal communication techniques, but above all, they should give a range of stakeholder groups the chance to directly discuss and debate issues. For educational school leaders to recognize the clarity of goals and the general understanding and attitude taken toward them, this use of communication must be facilitated through a two-way exchange where people feel their opinions are valued and can share candid and open reflections of their experiences. To guarantee that a consistent and cooperative approach serves as the foundation and works towards accomplishing institutional goals, it is crucial to recognize that if communication is disrupted or not translated as intended from an institution to the local level, this needs to be addressed. Furthermore, this paper highlighted the significance of cultivating trust, the advantages that come with it, and how it may support the establishment of a school climate and culture that will support the adoption and integration of a sustainable leadership concept.



Recommendations

Three recommendations are identified in this paper and will now be discussed.

- 1. Increasing training courses and workshops on sustainable leadership for SRS directors in Cambodia regarding the dimension of distributed leadership and succession. The results revealed that the level of SRS directors' application of these dimensions is lower than the rest of the dimensions of sustainable leadership.
- 2. Urging the teachers that sustainable leadership is a shared responsibility to be applied successfully and effectively. Sustainable leadership cannot be the responsibility of the sustainable leader only, but subordinates at all levels must participate with him in the decision-making processes.
- 3. Enhancing the degree to which SRS directors in Cambodia apply the distributed leadership dimension by boosting their confidence in the teachers' capacity to perform their duties effectively, boosting their interest in everyone's involvement in the decision-making process, and striving to activate the director's delegation of authority to teachers, giving them some degree of autonomy in carrying out school-related tasks.

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A Quantitative Correlational Study of Academic Leadership Practices among Secondary Resource School Teachers in Cambodia

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Abstract

Leadership studies in the existing scholarship have recently begun to expand into a variety of organizations, including basic education, but have focused more on administrators at the K-12 level, without a great deal of study of the role and practices of the teacher-leader. This quantitative correlational investigation sought to ascertain whether academic leadership preference and the academic subject taught by SRS teachers were statistically correlated. Academic (transformational) leadership theory made up the theoretical framework. A total of 452 SRSR teachers who completed the Multifactor Leadership Questionnaire (MLQ) were included in the sample. The findings of inferential tests, which included one-way ANOVA, Cramer's V, and Pearson's chi-square analyses, revealed no statistically significant relationship between academic leadership preference and academic subjects taught by SRS teachers. While the results did not show a statistically significant correlation between academic subjects taught by SRS teachers and academic leadership preference, administrators and leaders of SRSs can use this information to develop best practices that enhance teachers' job satisfaction, retention, and student instruction.

Policymakers and educators who involve in SRSs are given recommendations. The Ministry of Education, Youth and Sport, as well as national and international education partners, may find this study useful.

Keyword: Academic leadership, SRS teacher, job satisfaction



Introduction

Despite its troubled past and stunning natural surroundings, Cambodia and its people have optimism for a brighter future. Unfortunately, rather than the glorious Angkor-filled era, the Kingdom is recognized for Pol Pot and the Khmer Rouge regime that took power in 1975. In the four short but profoundly culturally impacting years of Pol Pot's communist rule, about 1.7 million people perished from starvation, torture, and execution. This genocide affected certain Cambodian institutions, such as schools, libraries, and art galleries, which were destroyed, shuttered, and prohibited from discussion as a result of cultural destruction (Mok, 2014; Lim, 2023).

The current body of literature on leadership has just started to branch out into a number of organizations, including education, although it has mostly concentrated on K–12 administrators, with little attention paid to the function and methods of teacher-leaders (Mok, 2014; Lim, 2023). It appears that the abrupt and unanticipated shift to distant learning during the pandemic has permanently altered pedagogical methods. At least at Secondary Resource Schools (SRSs), remote learning is here to stay, much like remote employment. All levels of education have been significantly impacted by this shift, but SRS appears to be more permanently changed, even if K-12 appears to be moving back toward a face-to-face structure more like to the pre-pandemic period (Mok, 2014; Lim, 2023). Based in part on the fact that SRS education is undergoing a once-in-a-generation change, the need for education leadership is increasingly apparent, with an accompanying need for increased study of instructor leadership practices at the SRS level.

The study of leadership historically focused on management practices within for-profit organizations. Still, there is increased interest in how academic leadership style can support the development of best practices in other fields, including education. Most of the existing research in the area of educational leadership is found at the K-12 level and focuses on the leadership styles of school leaders and administrators more so than teachers (Mok, 2014; Azizaha et al., 2020; Chen et al., 2020; Lim, 2023). Through such research, experts have discovered a link between different styles of academic leadership practices by teachers and the administration and overall student learning outcomes in face-to-face learning environments.



Research Objective

The purpose of this quantitative correlational study was to explore if there is a statistically significant relationship between the academic subject taught by SRS teachers and academic (transformational) leadership preference.

Research Question

What is the relationship between the academic subject taught by SRS teachers and academic (transformational) leadership preference?

Research Hypotheses

Referring to the research question above, the hypotheses were addressed:

H1₀: There is no statistically significant relationship between the academic subject taught by SRS teachers and those using an academic (transformational) leadership preference.

H1_a: There is a statistically significant relationship between the academic subject taught by SRS teachers and those using an academic (transformational) leadership preference.

Research Methodology

A correlational research design, which looks at statistical relationships between two or more variables without the researcher's intervention, was used for this study. The study's samples included 452 teachers who teach grades 7–12 at Secondary Resource Schools (SRSs) in Cambodia. These teachers were selected by simple random sampling, which involved drawing lots from the sample frame, and 10% of the entire teaching staff from each SRS in Cambodia.

The Multifactor Leadership Questionnaire (MLQ), a survey tool, was the sole tool utilized in the study. Bass and Avolio devised the MLQ computerized survey instrument (1995). Participants in the 45-question MLQ survey are asked questions about their leadership style. Items pertaining to the study's independent factors made up the MLQ survey. Single-response choices were presented after a succinct statement in each item. The MLQ is a 45-question survey that uses a Likert scale. Respondents select the response that best describes their leadership style. The categorical variables of academic leadership and instruction were measured using two scores from the same questionnaire.



Likert scales with five points and five anchors were used to measure academic (transformational) leadership. The scales' items were as follows: 0-Not at all; 1-Once in a while; 2-Sometimes; 3-Fairly regularly; 4-Frequently, if not always. Additionally, if the participants so desired, they could end the survey at any moment. In order to clean the data, the dataset was first checked for missing information (Field, 2018). List wise deletion was used to eliminate the entire case from the analysis if a value was missing. When managing missing cases in SPSS, this is the default method. Because a case has a missing value in at least one of the designated variables, it is removed from the analysis in a list wise deletion.

Data analysis was done once they were exported to SPSS version 27.0.0.0. The predicted frequencies in the contingency table are determined using the chi-square test hypothesis test, which is predicated on the idea that the two variables are independent. We then use the chi-square statistic to compare the observed frequencies to the expected frequencies. A significant relationship between the variables is more likely when the chi-square value is larger and the difference between the observed and predicted frequencies is greater (usually $p \le .05$). According to Turney (2022), the chi-square test of independence's null hypothesis states that there is no significant association between the two variables since they are independent. The null hypothesis was rejected and it was determined that there is a significant relationship between the two variables if the p value for this test is equal to or less than the selected significance threshold ($p \le .05$). The null hypothesis was not rejected if the p value was higher than the significance level ($p \ge .05$), and the conclusion that there is not enough evidence to support the association between the two variables was reached.

The effect size measurement for the chi-square test of independence employed in this investigation was a post-hoc test known as Cramér's V. A statistical metric called Cramér's V is used to assess how strongly two nominal variables in a contingency table are related. In the Cramér's V test, 0 denotes no association between the two variables, whereas 1 denotes a perfect association. It is computed by dividing the sample size by the square root of the chi-square statistic and subtracting 1 from the minimum number of rows and columns in the contingency table (McHugh, 2013).



Research Results

The research question asked: "What is the relationship between the academic subject taught by SRS teachers and academic (transformational) leadership style preference?" the hypotheses were addressed:

H1₀: There is no statistically significant relationship between the academic subject taught by SRS teachers and those using an academic (transformational) leadership style.

H1_a: There is a statistically significant relationship between the academic subject taught by SRS teachers and those using an academic (transformational) leadership style.

Table 1

Results of Chi-Square Tests for Academic Subject and Academic Leadership Style

	χ2	Df	P-value
Pearson Chi-Square	94.711	114	0.906
Likelihood Ratio	97.078	114	0.875
Linear-by-Linear Association	0.167	1	0.686
N of Valid Cases	95		

As revealed in Table 1, using SPSS version 29.0, chi-square analysis was initially conducted using the transformational leadership overall measure. The statistical significance of the association was not established (χ 2 (114) = 94.711, p = 0.906).

Table 2

Results of Eta Directional Measures for Academic Subject and Academic Leadership Style

	Variable	η
N	Academic Leadership Overall Dependent	0.143
Nominal by	1=Humanities, 2=Social Sciences, 3=Formal/Natural Sciences,	0.586
Interval	4=Professions/Applied Sciences Dependent	



As shown in Table 2, the result indicates that regarding the eta directional measure comparing the academic field and transformational leadership style, the association was observed to be small (Cohen, 1988), η = .142. Further, Table 3 below presents the results of Chi-Square tests for academic leadership items.

Table 3

Results of Chi-Square Tests for Academic Leadership Items

MLQ Surveyed Item	df	χ2	P-value	Cramer's V
Q2-AcademicIS	9	13.534	0.15	0.378
Q6-AcademicIB	12	7.218	0.844	0.277
Q8-AcademicIS	9	5.044	0.832	0.231
Q9-AcademicIM	6	5.666	0.462	0.245
Q10-AcademicIA	12	11.493	0.488	0.369
Q13-AcademicIM	6	5.114	0.530	0.233
Q14-AcademicIB	12	8.175	0.772	0.294
Q15-AcademicIC	6	0.742	0.098	0.337
Q18-AcademicIA	12	9.315	0.678	0.314
Q19-AcademicIC	6	4.539	0.605	0.220
Q21-AcademicIA	6	4.126	0.67	0.213
Q23-AcademicIB	6	11.768	0.068	0.353
Q25-AcademicIA	12	15.257	0.229	0.408
Q26-AcademicIM	12	8.555	0.742	0.303
Q29-AcademicIC	9	8.440	0.492	0.298
Q30-AcademicIS	6	3.764	0.710	0.120
Q31-AcademicIC	9	8.203	0.505	0.297
Q32-AcademicIS	9	8.004	0.532	0.292
Q34-AcademicIB	12	12.283	0.432	0.362
Q36-AcademicIM	6	9.920	0.29	0.324



For Table 3 above, Chi-square tests were used to ascertain the connections between academic subject and academic (transformational) leadership as determined by each individual item. None of the correlations were statistically significant, according to the results (p > .05).

Table 4 below presents the results of Games-Howell Post Hoc test.

Table 4

Results of Games-Howell Post Hoc Test

					95%	CI
		$ar{\mathcal{X}}$	SE	P	Lower	Upper
					Bound	Bound
	Social Sciences	0.366	0.195	0.265	-0.18	0.91
TT ::	Normal/Natural Sciences	-0.89	0.142	0.923	-0.49	0.31
Humanities	Professional Applied	0.069	0.132	0.955	-0.31	0.44
	Science					
	Humanities	-0.366	0.195	0.265	-0.91	0.18
g : 1g :	Normal/Natural Sciences	-0.455	0.180	0.081	-0.96	0.05
Social Sciences	Professional Applied	-0.297	0.172	0.337	-0.78	0.19
	Science					
	Humanities	0.89	0.142	0.923	-0.31	0.49
Normal/Natural	Social Sciences	0.455	0.180	0.081	-0.05	0.95
Sciences	Professional Applied	0.159	0.109	0.478	-0.15	0.46
	Science					
Professional	Humanities	-0.069	0.132	0.955	-0.44	0.31
Applied	Social Sciences	0.297	0.172	0.337	-0.19	0.78
Science	Normal/Natural Sciences	-0.159	0.109	0.478	-0.46	0.15

As shown in Table 4, only one-way ANOVA was performed to identify significant mean differences between individual responses to the academic (transformational) leadership-related question items and overall academic (transformational) leadership. The overall transformational



leadership mean did not change significantly (F(3, 94) = 0.627, p = .599). A significant Levene's test result (p < .001) indicated a breach of the homogeneity of variances assumption, therefore Games-Howell post hoc tests were performed. It is reasonable to use Games-Howell post hoc tests when the variances are not equal. However, the results showed that there were no significant mean differences. The equality of variances for a variable computed for two or more groups can be evaluated using Levene's test, an inferential statistic (Field, 2018).

The one-way ANOVA analysis's findings showed no discernible mean variations in leadership styles according to transformational leadership style. There was also no statistically significant correlation between academic subjects taught by postsecondary online professors and those that used an academic (transformational) leadership preference, according to the findings of chi-square tests, which failed to reject the first null hypothesis.

Discussion and Conclusion

The first null hypothesis was not refuted since no meaningful connections between academic (transformational) leadership and the academic subjects taught were discovered. The results showed that academic (transformational) leadership is not important in the disciplines that SRS teachers teach. The academic subjects taught and the academic (transformational) leadership style employed by SRS teachers did not significantly correlate, according to this result. The literature gap revealed that there was little empirical information available in academia regarding the academic subjects taught and the preferred leadership styles of SRS teachers. These results filled the gap by showing that there was no relationship between the academic subject taught and the academic (transformational) leadership style employed by SRS teachers.

Knowledge sharing and academic (transformational) leadership have a favorable effect on creativity and innovation, which in turn has a positive effect on the academic subject taught (Elrehail et al., 2018). Since moving into a teaching setting calls for inspiration, creativity, and innovation, transformational leadership might be the best fit for improving the academic subjects that instructors teach. Knowledge sharing, which is a crucial component of both online and offline learning aimed at encouraging innovation and creativity among the learners, is encouraged by academic (transformational) leadership (Khan et al., 2020). Different study settings, target demographics, sample sizes, geographic locations, and participant variety may all contribute to the



disparity in results. Thus, SRS teachers may need academic leadership that promotes academic-specific values (Elrehail, 2018; Elrehail et al., 2018; Khan et al., 2020). The results of earlier studies showed that the academic subject taught may be significantly correlated with preferences for academic leadership, such as transformational leadership style.

Suggestions

Suggestions for Future Practices

- 1. Basic learning institutions can learn more about the academic leadership of SRS teachers in learning environment by using the results of the current study. A key component of basic education training is an academic leadership. Although management and classroom leadership methods are similar, the majority of research has concentrated more on administrative and management responsibilities in in-person instruction than on identifying the best leadership practices for assisting and directing SRS teachers in educational settings.
- 2. The learning environments at SRS might benefit from a more structured leadership style, like academic leadership, as academic (transformational) leadership approaches thrive in inperson settings. Management in basic learning institutions can use the information from the current study to choose the best academic leadership to lead and guide their teachers utilizing best practices, which will help them give their students with a high-quality education.

Suggestions for the Future Study

- 1. Due to the intentional rather than random sample selection procedure, the results of this study cannot be extrapolated to the larger community from whom the study participants were drawn. According to Trochim and Donnelly (2001), the hypothesis tests' findings lacked external validity. Thus, in order to improve the generalizability of results to a larger population, additional study should be carried out with a random sample technique. The validity of the study's findings is increased by improving their generalizability.
- 2. Mono-source bias, which results from utilizing only one data collection tool and can significantly reduce the trustworthiness of survey-based data, was a limitation of this study. To prevent mono-source bias in data collection, which can reduce the reliability of the data gathered and hence compromise the validity of the study findings, further research in this area should be carried out utilizing a variety of data sources.



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English Speaking Ability and Self-Efficacy through Task-Based Instruction of Thai EFL Undergraduate Students: A Synthesis Study

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Abstract

The purpose of this study is to synthesize and analyze the concepts of task-based instruction, English speaking ability and self-efficacy by using the documentary research technique. A method of research involves analyzing and interpreting the existing documents to gather information and develop insights in order to support a study. The target group used in the study consisted of previous studies, theories, and related documents. This study reviews the conceptual framework of task-based instruction in enhancing English speaking ability and self-efficacy of Thai EFL undergraduate students. The most percentage for synthesis and analysis was chosen to interpret data. The research findings showed key aspects of English speaking ability: fluency, accuracy, pronunciation, and vocabulary in the classroom setting of Thai EFL undergraduate students with the self-efficacy survey. These approaches are valued for fostering communicative competence as it aligns closely with real-world language use. The results of this paper will be the research framework used in creating the suitable teaching intervention and classroom activities through Task-based Instruction for undergraduate students in the next academic year.

Keyword: Synthesis English Speaking ability, Self-efficacy, Task-based Instruction, Synthesis Study



Introduction

Speaking is one of the most important skills for EFL or ESL students, as they allow them to communicate with others and express their thoughts and feelings. Speaking skills can be separated into formal and informal speaking skills, and we use both types of speaking skills in a variety of contexts throughout life (Lopez, 2011). As an EFL or ESL learner, speaking skills are considered the most important part of learning a language. In fact, many language learners measure their performance by how well they can speak it. As most effective foreign language learning takes place through interaction, it's a skill that can be used to really build an understanding of the language and culture of English-speaking countries (Ismaili & Bajrami, 2016). Speaking is not as difficult as ability. There are a lot of ways to master speaking, as long as learners want to practice any situation. EFL/ESL learners need to recognize that they have potential to be a good speaker. They should open themselves to any chances of self-development in speaking and feel confident in speaking. Besides, they do not have good grammar and pronunciation, they must learn from their experience (Aristy et al. 2019). Hymes (1972) introduced the "SPEAKING model" to categorize the components of communicative events. This model includes; S - Setting and scene, P - Participants, E - Ends (goals of communication), A - Act sequence (the order of communication), K - Key (tone, mood), I - Instrumentalities (tools and forms of communication), N - Norms (social rules), and G - Genre (types of speech events). His model remains a key tool for understanding the complexities of communication.

English-speaking ability in the Thai context can vary widely depending on factors such as education, exposure to the language, and the specific environment in which English is being used. English is often the medium of instruction in international schools and certain university programs. Thai students may practice English during group activities, debates, and oral presentations. English is part of the national curriculum from an early age, but emphasis is often placed on grammar, reading, and writing rather than speaking. Traditional classroom methods focus on passive learning, limiting opportunities for interactive speaking practice. As a result, many Thai EFL learners have limited practical speaking skills despite years of study. Besides, the globalized nature of communication has heightened the demand for English proficiency, particularly in speaking. In Thailand, despite years of formal English instruction, many students struggle with spoken fluency due to traditional teaching methods that emphasize rote



memorization over meaningful communication. This study investigates the role of Task-Based Instruction (TBI) in enhancing both speaking ability and self-efficacy in English among Thai EFL students.

Task-Based Instruction

Willis (1996) and Ellis (2003) proposed a three-stage framework for Task-Based Instruction (TBI) in the classroom. The first stage, Pre-Task, involves introducing the topic, providing necessary language input, and activating students' prior knowledge. In the Task Cycle, students work in pairs or groups to complete the task, focusing on fluency without teacher correction. Then, they plan and present their outcomes, allowing for accuracy and peer feedback. The final stage, Post-Task, involves reflecting on the task, analyzing language forms used, and providing feedback and practice on specific linguistic elements. An example could be discussing past travel experiences before planning a trip and analyzing effective expressions used during the task, Task-Based Instruction (TBI) offers several advantages, such as encouraging authentic communication, problem-solving, and collaboration, while boosting learner motivation by connecting tasks to real-world situations, Nunan (2003) discussed Task-Based Language Teaching (TBLT) as an approach in which language learning is driven by tasks that reflect real-world activities. In TBL, tasks are designed to promote interaction and the use of language for meaningful communication. The tasks can range from simple to complex and should be authentic, encouraging learners to engage with the language in a natural, communicative manner. It also promotes the development of integrated language skills in a natural context. However, TBI presents challenges, including the need to design tasks suitable for various proficiency levels, balancing fluency and accuracy during tasks, and ensuring teachers are well-prepared and flexible enough to manage unpredictable outcomes. Task-based learning helps learners to use language in realistic situations, giving them the opportunity to engage in both controlled and free communication activities (Harmer, 2007).

Cognitive Barriers in Speaking English

Sweller (1994) investigated cognitive barriers in speaking English include limited working memory, which makes it difficult to hold and organize words while speaking, and slow language processing speed, leading to delays in conversation. Lexical retrieval problems cause difficulty in recalling words quickly, resulting in hesitation and filler words. First language



interference leads to structural errors and unnatural phrasing, while a lack of automaticity forces learners to consciously think about grammar and vocabulary, slowing down speech. Cognitive overload occurs when focusing on multiple aspects of speaking at once, increasing errors and hesitation. Lastly, anxiety and cognitive blocks reduce working memory capacity, making it harder to recall words and construct sentences fluently. Overcoming these barriers requires regular practice, thinking directly in English, using chunking techniques, active listening, and reducing anxiety to improve fluency and confidence. Outside the classroom, Thai students have few chances to use English. Their exposure to media, daily conversations, and native English speakers is much lower than in countries where English is more commonly used in public life (Glass, 2009).

Obstacles in Teaching Speaking to Thai EFL Students

Teaching English speaking skills to Thai EFL (English as a Foreign Language) students faces several challenges, including limited exposure to English, pronunciation difficulties, grammar-based instruction, fear of making mistakes, and cultural barriers. Many Thai students have minimal opportunities to practice speaking outside the classroom, leading to low fluency and confidence (Khamkhien, 2010). One researcher found that pronunciation issues arise due to phonological differences between Thai and English, making certain sounds difficult to produce. The Thai education system traditionally emphasizes rote learning and grammar, reducing opportunities for communicative practice (Noom-ura, 2013). Additionally, many students experience anxiety and fear of speaking, worrying about errors and losing face, which discourages active participation (Kitikanan & Sasimonton, 2017). Harmer (2007) claimed that fluency and accuracy need to be taught in tandem, but at different stages. While fluency is emphasized in communication, accuracy remains important in developing a full range of language skills. Cultural norms that prioritize politeness and indirect communication also affect students' willingness to speak in English. To overcome these obstacles, a communicative approach, increased speaking opportunities, and confidence-building activities are essential in Thai EFL classrooms. The trends in teaching English speaking to Thai EFL students, therefore, reflect a shift towards communicative, technology-enhanced, and student-centered methods. By focusing on real-life tasks, pronunciation, fluency, and cultural context, educators are equipping students with the skills needed for effective and confident speaking in English. Krashen & Terrell (1983) argued language



acquisition is most successful when it occurs in communicative contexts. Learners should be encouraged to interact in the target language, not just memorize vocabulary or grammar rules. Richards & Rodgers (2014) explored the key principles and theoretical assumptions behind each method, including: Linguistic theory –How each method views language as a system, Learning theory–How each method understands language learning (e.g., behaviorist theories for Audiolingual, cognitive theories for Task-Based Learning), and Psychological theory–How each method understands the mental processes involved in learning a second language.

Self-Efficacy

Self-efficacy plays a crucial role in the success of Thai EFL (English as a Foreign Language) students. It influences their motivation, learning strategies, and overall language proficiency. Students with higher self-efficacy tend to engage more actively in learning, persist through challenges, and develop better speaking and writing skills. According to Bandura (1977), the theory developed for an individual's belief in their ability to perform a task or achieve a goal. Self-efficacy and speaking ability are closely linked, particularly in language learning contexts like EFL (English as a Foreign Language). Self-efficacy refers to a learner's belief in their ability to successfully perform a task, while speaking ability involves the capacity to communicate effectively in spoken language. Higher self-efficacy positively influences speaking ability in several ways. For example, learners with strong self-efficacy are more confident in their speaking skills, making them more likely to engage in conversations, participate in discussions, and practice speaking English in real-life situations (Bandura, 1997). On the other hand, low self-efficacy often leads to fear of making mistakes, resulting in speaking anxiety (Horwitz et al., 1986). Conversely, students with high self-efficacy are less afraid of errors and more willing to take risks, improving their fluency and pronunciation. Self-efficacy influences students' speaking ability and the higher students' self-efficacy the better speaking skills could be performed (Sumarsono et al., 2020). Nur and Butarbutar (2022) declared that TBI is more likely to help students' self-efficacy by encouraging focus on their tasks, and implied that collaboration TBI is effective to empower students' self-efficacy.



Research Objective

To synthesize and analyze the role of Task-based Instruction in English speaking ability and self-efficacy of Thai EFL undergraduate students.

Research Methodology

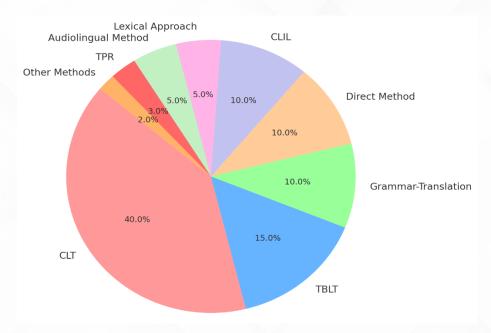
This study is a synthesis and analysis of the theories and research articles related to task-based instruction in English speaking and self-efficacy of Thai EFL undergraduate students during 2010 - 2023. The content analysis method was used to categorize the important scopes and issues related to the study.

Research Results

Based on the overview of previous studies and related literature, the results show that there are many approaches to improve students' speaking ability and self-efficacy as follows.

Figure 1

Estimated Usage of Major ELT Approaches



The percentage of each approach used in English Language Teaching (ELT) can vary based on region, institutional policies, and teaching contexts. However, based on global trends and research in language education, the following estimated distribution can be considered: CLT

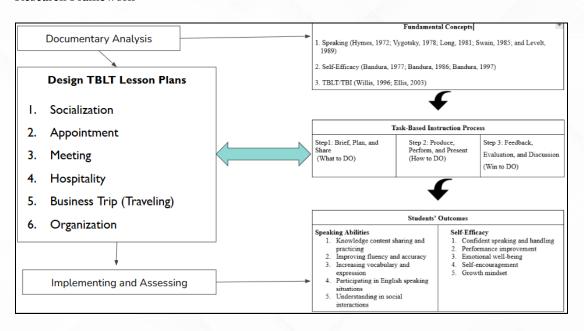


(40%) as the dominant approach in ELT worldwide, especially in communicative-focused curricula, TBLT (15%) increasingly popular, particularly in learner-centered and experiential learning settings, Grammar-Translation (10%) still common in traditional education systems, especially in Asia and Europe, Direct Method (10%) used in immersion programs and private language institutions, while CLIL (10%) growing in bilingual education programs and international schools, Lexical Approach (5%) used in vocabulary-focused instruction, Audiolingual Method (5%): Found in military and intensive language training, TPR (3%) primarily used in early childhood and beginner-level learning, and other Methods (2%) includes Silent Way, Suggest opedia, and experimental techniques.

According to this study, task-based language learning and teaching or task-based instruction is considered to be a treatment for Thai EFL undergraduate students, majoring in Business English Program at Buriram Rajabhat University. The researcher synthesized, analyzed, and summarized as the conceptual framework used in this study below.

Figure 2

Research Framework



Moreover, the percentage distribution of speaking aspects varies across different studies; Pronunciation (30–35%) – Thai students face significant pronunciation challenges due to phonological differences between Thai and English. Studies highlight that pronunciation



difficulties (e.g., consonant clusters, vowel sounds, and final sounds) contribute heavily to communication breakdowns (Khamkhien, 2010); Fluency (25–30%) – Fluency is affected by a lack of real-life speaking practice and fear of making mistakes, leading to hesitation and pauses (Kitikanan & Sasimonton, 2017). The limited use of English outside the classroom also contributes to low fluency levels; Vocabulary (20–25%) – Thai EFL learners often have a limited vocabulary, making it difficult to express ideas effectively (Noom-ura, 2013). This results in frequent reliance on simple words or code-switching to Thai; and Grammar (15–20%) – While grammar is heavily emphasized in Thai education, its direct impact on speaking is lower than pronunciation and fluency. Many students struggle with sentence structure, verb tenses, and subject-verb agreement (Khamkhien, 2010). However, grammar mistakes are often overlooked in informal conversations compared to pronunciation and fluency issues.

As many previous studies on students' self-efficacy, this suggests that Thai EFL students often lack confidence in their speaking abilities.

Table 1

Thai EFL Students' Self-efficacy in English Speaking Abilities

Self-efficacy Level	Score Range	Percentage
Very low	1.00 - 1.99	33%
Low	2.00 - 2.49	47%
Moderate	2.50 - 3.49	12%
High	3.50 - 4.00	8%

Discussion and Conclusion

Based on the result, pronunciation and fluency have the most significant impact on Thai EFL learners' speaking abilities, while vocabulary and grammar play slightly smaller roles. Addressing these areas through communicative teaching strategies and pronunciation-focused training can improve speaking proficiency among Thai students. Baddeley (2003) also identified the cognitive barriers in speaking English that are mental challenges that interfere with fluency,



accuracy, and confidence in communication. These difficulties affect learners' ability to retrieve words, process information, and construct sentences effectively. If working memory is weak, learners may struggle to hold and organize words and grammar in their minds, leading to hesitation, repetition, or incomplete sentences. The most common cognitive barriers include the limited ability to memorize, a lack of fluency as the brain struggles to convert thoughts into speech (Levelt, 1989), and having multiple aspects of speaking (grammar, pronunciation, vocabulary, fluency) at once increases mental load. Swain (1985) highlighted the importance of speaking and writing in developing accuracy, fluency, and communicative competence. Her insights have influenced modern task-based language teaching (TBLT), communicative language teaching (CLT), and interaction-based learning approaches.

Several researchers have attempted to analyze their impact on English-speaking proficiency among EFL learners, particularly in Thailand. While there is no universally fixed percentage, previous studies suggest approximate weightings based on their influence in speaking assessments and learner difficulties. Beding & Inthapthim (2019) investigated the effects of Task-Based Language Teaching (TBLT) on the speaking skills of Thai EFL learners at the University of Phayao and explored their perceptions of TBLT in the classroom. Thirty-six first-year students participated in the study, which involved pre- and post-speaking tests, questionnaires, and interviews. The results showed a significant improvement in speaking skills after using TBLT, with a positive perception of the approach from the students. Despite some challenges, the study suggests that TBLT effectively enhances speaking skills and benefits Thai EFL learners. Manorom (2023) proposed an alternative approach to designing English for Specific Purposes (ESP) materials for an English for Tourism course and suggested the model used for ESP course design and emphasizes the importance of incorporating language tests for a more comprehensive needs analysis. Another research, Sumarsono et al. (2020) explored whether Task-Based Language Teaching (TBLT) improves speaking performance, whether students with high self-efficacy perform better in speaking tasks, and if there is any interaction between teaching methods and self-efficacy. The results showed that TBLT significantly enhanced speaking performance, and students with higher self-efficacy performed better. However, there was no significant interaction between TBLT and self-efficacy, suggesting that TBLT's effectiveness is not influenced by self-efficacy levels.



Zimmerman (2000) also mentioned that in the last twenty years, self-efficacy has proven to be a powerful predictor of student motivation and learning. Unlike related concepts such as outcome expectations, self-concept, or locus of control, self-efficacy specifically measures perceived capability and has been validated both discriminant and convergent in predicting key motivational outcomes like effort, persistence, and emotional responses. Self-efficacy beliefs are influenced by changes in the learning environment, interact with self-regulated learning, and help mediate academic success. Unfortunately, determining the exact percentage contribution of each aspect of self-efficacy-mastery experiences, vicarious experiences, social persuasion, and physiological and emotional states—to Thai EFL students' speaking abilities is challenging due to limited specific data. However, existing studies provide insights into the general levels of selfefficacy among these learners. For overall self-efficacy level, some research indicates that Thai EFL students often exhibit low self-efficacy in oral English communication. For instance, a study assessing students' confidence in speaking English fluently found consistently low levels of selfefficacy among participants. Another study explored self-perception across different English language skills of Thai EFL learners. It revealed that high proficiency learners ranked listening skill self-efficacy as the highest, while mid and low proficiency groups ranked reading skill selfefficacy as their top skill. This suggests variability in self-efficacy perceptions across different language skills. Horwitz et al. (1986) guided that teachers can play a significant role in reducing language anxiety by creating a supportive and low-stress environment where students feel comfortable taking risks and making mistakes.

Suggestion

English teachers and lecturers should adapt and use the appropriate and certain kind of task-based activities to help in motivating students when using the target language in the classroom (Beding & Inthapthim, 2019) in accordance with Chooma & Chattiwat (2020) suggestion that further study should be conducted the similar research with different groups of students from different majors.

The results in this study could help in guiding English language instructors to appropriately design classroom-based activities through TBI for speaking courses. As students



gain confidence in their speaking abilities, they tend to practice more, which can lead to improved fluency (speaking more smoothly) and greater accuracy in grammar and vocabulary usage.

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Using Metacognitive Strategies on Enhancing English Reading Comprehension for Thai High School Students

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Abstract

The purpose of this study was to investigate the metacognitive reading strategies employed by Thai high school students in reading English texts. The participants included 285 Grade 11 students enrolled in the English course (E32102) during the second semester of the 2024 academic year in Prakhonchai District, Buriram Province. The students were purposively selected for the study. The research instrument consisted of an open-ended metacognitive strategies questionnaire designed to collect both quantitative and qualitative data. Statistical analysis, including means and standard deviations, was conducted to examine the findings.

The results indicated that students employed metacognitive reading strategies at a moderate level. Among the three types of strategies, **problem-solving strategies** were used most frequently, followed by **global strategies**, while **support strategies** were the least utilized. The findings highlight that Thai high school students rely on metacognitive strategies to aid their English reading comprehension, yet there is room for improvement in applying global strategies to enhance overall reading efficiency. The study recommends integrating explicit metacognitive strategy instruction into L2 reading curricula. Teachers should directly train students in global reading strategies to enhance awareness and application. Future research should investigate alternative assessments and interventions to further support reading comprehension development.

Keyword: Metacognitive Strategies, Reading Comprehension, Thai High School Students



1. Introduction

Reading plays a central role in our educational, working, recreational, and social lives. The ability to read is highly valued and important for social and economic advancement. Reading is the most important skill among the four language skills as it can improve the overall language proficiency (Snow, Burns & Griffin, 1998; McDonough & Shaw, 1993; Krashen & Brown,2007). Even though one may have reading difficulties in his or her mother tongue, the problems get worse when reading is applied to a second language, as students might be lagging behind in a number of reading components, including accuracy, comprehension, and speed. Lagging behind is a cognitive difficulty associated with the process of reading in another language (Alsamadani,2008).

To improve communication, English language learners have required four macro skills to include reading, listening, speaking, and writing (Aydogan & Akbarov, 2014). Among the four macro skills, reading skills are considered the main doorway to knowledge (Shehadeh, 2016). Previous studies (Amin, 2019; Madhumathi & Ghosh, 2012) also stated that reading played a significant role in education. Reading is an "interactive" process between the reader and the text in which the reader interacts dynamically to elicit some meaning. Many studies have explored several factors to determine ESL reader's comprehension and to identify how reading strategies contribute to effective reading.

Reading comprehension is one of the most important study skills in higher education. One of the vital factors in the process of learning English language is reading comprehension. Researchers have indicated that the process of reading comprehension is quite complex and students often struggle in constructing the meaning and comprehension of the text (Grabe &Stoller,2002). Theoretically, reading comprehension is an interactive process of deriving meanings from a text (Rumelhart,1981). The study conducted by Salataki & Akyel (2002) suggests that students, who start to learn the English language, are most likely to have serious difficulties in constructing meaning and understanding texts. Most researchers agree that reading comprehension is not simply recognizing individual words, or even understanding each individual word as our eyes pass over it. All models of comprehension recognize the need for readers to build up a mental representation of text, a process that requires integration across a range of sources of



information, from lexical features to knowledge concerning events in the world (e.g., Garnham, 2001; Gernsbacher, 1990; Kintsch,1998).

Despite English being a compulsory foreign language in Thailand, research indicates that Thai students' overall reading proficiency falls below the National English Test criteria (Wongsuwan, 1992), even though they begin learning English in grade 4. Their poor performance is attributed to difficulties in comprehending texts, understanding details, identifying the main idea, and applying critical reading skills (Thanbanjerdsuk, 1983; Wirunhayan, 1987; Torut, 1994). Similarly, Grade 11 students in Prakhonchai District, Buriram Province struggle with English reading comprehension.

Metacognition is associated with reading awareness and reader who have great metacognitive awareness tend to more successful or skilled readers (Chamot, 1998, as cited in Hong-Nam& Page ,2014). Ismail and Tawabebeh (2015) , Who conducted a study about metacognitive reading strategies with 41 EFL non- English major students, found that the reading strategies use help readers solve their reading difficulties and increase their reading ability. Anderson (2000) explains the connection between metacognition and reading comprehension that the ability to use the metacognitive skills effectively and to monitor reading is an important component of skilled reading.

Metacognitive reading strategies are highly effective in enhancing reading comprehension, particularly in second and foreign language learning (Ahmadi et al., 2013). These higher-order skills involve cognitive awareness and self-regulation through planning, monitoring, and evaluation (Hartman, 2001b; L. Zhang & Seepho, 2013). To effectively apply metacognitive strategies, teachers should provide systematic instruction on metacognition and learning strategies. This enables students to better understand and apply these strategies across various reading tasks. Cubukcu (2008) found that teaching metacognitive reading strategies significantly improved reading comprehension. Structured instruction helped students develop declarative, conditional, and procedural knowledge (Veenman in Ahmadi et al., 2013; Hartman, 2001b), guiding them on when, why, and how to use strategies. Over time, students begin to think metacognitively, transforming from passive readers into strategic, self-regulated learners. Israel (2007) strongly agrees that metacognitive strategies increase readers' meaning construction, monitoring of text and reading comprehension, and their ability to evaluate the text they are reading.



This study investigates how metacognitive strategies improve reading comprehension among Thai high school students, aiming to inform the design of tailored English courses and support teachers in enhancing students' reading skills.

2. Research Objectives

To investigate the metacognitive strategies that Thai high school students use in English reading comprehension.

2.1 Research Questions

- 1. What metacognitive strategies do Thai High School students use in English reading comprehension?
- 2. Is there a difference in the use of metacognitive strategies between male and female students?

2.2 Scope and Limitations of the Research

This study investigated the metacognitive strategies used in English reading comprehension of Thai high school students in Prakhonchai District, Buriram Province who enrolled the English course (E32102) in the 2 semester of the academic year 2024.

2.3 Significance of the Study

- 2.3.1. This research identifies the metacognitive strategies used by Thai high school students in their English reading course (E32102) and aims to enhance their awareness of these strategies. Greater metacognitive awareness is expected to improve their reading skills, boost confidence, and foster independent, active reading.
- 2.3.2 This study provides pedagogical insights for English teachers to enhance reading instruction, particularly for struggling students. Additionally, the findings serve as a guideline for identifying effective reading strategies and equipping students with a repertoire of metacognitive strategies applicable across various text types.
- 2.3.3 This study may also benefit Thai high school students by enabling them to identify and understand their specific challenges in reading skills.
- 2. 3. 4 Finally, the study's findings may help Thai high school teachers develop effective pedagogical models to enhance students' English reading strategies and support language learning.



3. Methodology

3.1 Participants

The study involved 285 grade 11 students enrolled in the English course (E32102) during the second semester of 2024 in Prakhonchai District, Buriram Province.

3.2 Research Instruments

Questionnaire

In this present study, there was questionnaire comprised of open-ended questions. The questionnaire was constructed by using the Five-Point Likert scale. A mean score derived from the students' opinions was interpreted by ranking from very high, high, moderate, low, and very low. 'Very high' is valued as '4.5 - 5.0'. 'High' is valued as '3.5 - 4.4'. 'Moderate' is valued as '2.5 - 3.49'. 'Low' is valued as '1.5 - 2.49', and "Very Low" is valued as '1.0 - 1.49'.

3.3 Data Collection

The 285 participants were asked to complete the questionnaires in a span of 15 minutes. They provided information with good cooperation.

3.4 Data analysis and Statistical Procedures

3.4.1 Analysis of Data from the Metacognitive Awareness of Reading Strategies Inventory (MARSIS)

3.4.1.1 Frequency, Mean (\overline{X}), and Standard Deviation (S.D)

Quantitative data was analyzed as mean and standard deviation, and with the assistance of the SPSS program in order to achieve the research purposes concerning analyzing and interpreting the data obtained from the questionnaire. Each group's frequency, mean (\overline{X}), and standard deviations (S. D.) of thirty strategies were calculated. Then they were ranked according to the mean values of these items. Also, the three board categories of the Metacognitive Awareness of Reading Strategies Inventory (MARSIS) were used by these statistics procedures. All data were entered into Statistical Package for the social Science (SPSS) to run the above mentioned statistics for analysis. However, the three levels of strategy use: "high use", "moderate use", and low use base on the holistic means scores of frequencies of strategy used by the research subjects under the present investigate were define.

Base on the three levels of interpretation of reading strategy used by Oxford and Burry – Stock (1995, cited in Sarom,2010), these means can be divided into three



groups to understand the average scores of the questionnaires. The three levels of interpretation of reading strategy are presented as follows:

Table1.1

Three Levels of Interpretation Proposed by Oxford and Burry-Stock (1995)

The Key to Understand Average of Usage Group				
TT: _1.	Always Use	2.501		
High	Often Use	3.50 or above		
Moderate	Occasionally Use	2.50 to 3.49		
T	Seldom	D.1. 250		
Low	Never Use	Below 2.50		

To effectively explain students' awareness of metacognitive reading strategies, the researcher opted for qualitative research over quantitative methods when interpreting the questionnaire results.

4. Results of the Study

Questionnaire

Research Question: What metacognitive strategies do Thai High School students use in English reading comprehension?

Students use the Metacognitive Strategies on Enhancing English Reading Comprehension for Thai High School Students

This study investigate the Metacognitive Strategies Thai high school students use for English reading comprehension. Table 5.1 presents the results, highlighting the specific strategies students apply while reading.



5. Research Results

5.1. Overview of Results of Using the Metacognitive Strategies in English Reading Comprehension Text.

Table 5.1

Overview of Results of Using the Metacognitive Strategies in English Reading Comprehension Text.

Types	Strategies	Mean	S.D.	Meaning
1.	Global Strategies	3.49	1.090	Moderate
2.	Problem-Solving Strategies	3.51	1.120	High
3.	Support Strategies	3.48	1.120	Moderate
	Average	3.49	1.110	Moderate

The findings of this study revealed that Thai high school students employed metacognitive reading strategies at a **moderate level**, as indicated by the overall average mean score of 3.49 (SD = 1.11). Among the three categories of strategies, **Problem-Solving Strategies** were used most frequently, with a mean score of 3.51 (SD = 1.12). These strategies involve techniques such as rereading difficult text, adjusting reading speed, and using context clues, suggesting that students actively engage in problem-solving when encountering comprehension difficulties. **Global Strategies**, which include setting reading purposes and previewing texts, had a mean score of 3.49 (SD = 1.09), indicating that students moderately applied these strategies to enhance their overall understanding. Meanwhile, **Support Strategies**, such as note-taking, underlining key information, and using reference materials, had the lowest mean score of 3.48 (SD = 1.12), although still within a moderate usage level.

5.2 The Results of Using the Metacognitive Strategies on Enhancing English Reading Comprehension for Thai High School students.



Table 5.2

The Results of Using Global Strategies in English Reading Comprehension Texts.

No.	Strategies	Mean	S.D.	Meaning
	Global Strategies			
1.	I have a purpose in mind when I read English reading	3.44	0.96	Moderate
	text.			
2.	Think about what I already know to help me understand	3.47	1.09	Moderate
	what I read.			
3.	I take an overall view of the reading text to see what it is	3.64	1.14	High
	about before reading it.			
4.	I analyze whether the content of the reading	3.33	1.09	Moderate
	comprehension text fits my reading purpose.			
5.	review the reading comprehension text first by noting its	3.59	1.10	High
	characteristics like length and organization.			
6.	6. When reading comprehension text, I decide what to	3.45	1.10	Moderate
	read closely and what to ignore.			
7.	7. When reading text becomes difficult, I pay closer	3.63	1.14	High
	attention to what I am reading.			
8.	8.I critically analyze and evaluate the information	3.33	1.08	Moderate
	presented in the English text.			
	Average	3.49	1.090	Moderate

Global strategies, which involve planning and organizing the reading process, had an average mean score of 3.49 with a standard deviation of 1.09. Among the eight strategies in this category, the highest mean score was observed for "I take an overall view of the reading text to see what it is about before reading it" ($\mathbf{M} = 3.64$, $\mathbf{SD} = 1.14$), suggesting that many participants actively preview texts before reading. Additionally, "When reading text becomes difficult, I pay closer attention to what I am reading" ($\mathbf{M} = 3.63$, $\mathbf{SD} = 1.14$) also had a high mean score, indicating that participants use focused attention to enhance comprehension. The lowest mean score was for "I analyze whether the content of the reading comprehension text fits my reading



purpose" (M = 3.33, SD = 1.09), suggesting that fewer participants consciously evaluate content relevance before reading.

5. 3 The Results of Using Metacognitive Strategies on Enhancing English reading Comprehension for Thai High School Students.

Table 5.3

The Results of Using Problem-Solving Strategies in English Reading Comprehension Texts.

No.	Problem-Solving Strategies	Mean	S.D.	Meaning
1.	When reading comprehension text becomes difficult, I	3.52	1.07	High
	read aloud to myself to understand what I read.			
2.	I read slowly and carefully to make sure I understand	3.58	1.08	High
	what I am reading.			
3.	I try to get back on track when I lose concentration.	3.47	1.21	Moderate
4.	I adjust my reading speed according to what I am	3.40	1.11	Moderate
	reading.			
5.	I use context clues to help me better understand what I	3.53	1.13	High
	am reading.			
6.	I go back and forth in the English comprehension text to	3.44	1.13	Moderate
	find relationships among ideas in it.			
7.	When English comprehension text becomes difficult, I	3.52	1.15	High
	reread it to increase my understanding.			
8.	When I read, I guess the meaning of unknown words or	3.62	1.11	High
	phrases.			
	Average	3.51	1.120	High

Problem-solving strategies, which help readers regulate their comprehension when encountering difficulties, had the highest overall mean score of 3.51 and a standard deviation of 1.12. The most frequently used strategy in this category was "When I read, I guess the meaning of unknown words or phrases" (M = 3.62, SD = 1.11), reflecting an active approach to inferring word



meanings from context. Similarly, "I read slowly and carefully to make sure I understand what I am reading" (M = 3.58, SD = 1.08) was also commonly used. Conversely, "I adjust my reading speed according to what I am reading" (M = 3.40, SD = 1.11) received the lowest mean score, suggesting that readers may not frequently adapt their pace based on text complexity.

5. 4 The Results of Using Metacognitive Strategies on Enhancing English reading Comprehension for Thai High School Students.

Table 5.4

The Results of Using Support Strategies in English Reading Comprehension Texts.

No.	Strategies	Mean	S.D.	Meaning
Support S	trategies			
1.	Take notes while reading text to help me understand	3.02	1.15	Moderate
	what I read.			
2.	I underline or circle information in the reading	3.81	1.18	High
	comprehension text to help me remember it.			
3.	I use reference materials (e.g., a dictionary) to help me	3.13	1.19	Moderate
	remember it.			
4.	I use tables, figures, and pictures in reading	3.22	1.17	Moderate
	comprehension text to increase my understanding.			
5.	I stop from time to time and think about what I am	3.44	1.12	Moderate
	reading.			
6.	I paraphrase (restate ideas in my own words) to better	3.48	1.12	Moderate
	understand what I read.			
7.	I try to picture or visualize information to help remember	3.79	1.07	High
	what I read.			
8.	I use typographical features like bold face and italics to	3.56	1.16	High
	identify key information.			
9.	I check my understanding when I come across new	3.49	1.04	Moderate
	information.			
10.	I try to guess what the context of the English reading	3.69	1.07	High



No.	Strategies	Mean	S.D.	Meaning
	comprehension text is about when I read.			
11.	I ask myself questions I'd like to have answered in the	3.38	1.07	Moderate
	English comprehension text.			
12.	I check to see if my guesses about the business text are	3.56	1.04	High
	right or wrong.			
13.	When reading English comprehension text, I translate	3.59	1.19	High
	from English into Thai.			
14.	When reading English comprehension text, I think about	3.60	1.13	High
	information in both English and Thai.			
	Average	3.48	1.120	Moderate

Support strategies, which assist readers in maintaining focus and reinforcing learning, had an overall mean score of 3.48 with a standard deviation of 1.12. The most frequently used strategy in this category was "I underline or circle information in the reading comprehension text to help me remember it" ($\mathbf{M} = 3.81$, $\mathbf{SD} = 1.18$), highlighting the importance of annotation in comprehension. Additionally, "I try to picture or visualize information to help remember what I read" ($\mathbf{M} = 3.79$, $\mathbf{SD} = 1.07$) was another common technique. On the other hand, "Take notes while reading text to help me understand what I read" had the lowest mean score ($\mathbf{M} = 3.02$, $\mathbf{SD} = 1.15$), indicating that note-taking is less frequently employed as a comprehension aid.

5. 5 Comparison of Using the Metacognitive Strategies in English Reading Comprehension Text between Male and Female

Table 5.5



Comparison of Using the Metacognitive Strategies in English Reading Comprehension Text Male and Female

	Gender	N	Mean	S.D.	t	P
Global	Male	95	3.3979	.82591	-1.615	0.5
Strategies	Female	190	3.5558	.75337	-1.566	.05
Problem	Male	95	3.3885	.80140	-1.983	02
Solving	Female	190	3.5871	.79443	-1.978	.02
Support	Male	95	3.6702	.86363	-2.671	0.4
Strategies	Female	190	3.9556	.84371	-2.650	.04
Total	Male	95	3.4855	.77770	-2.227	0.1
Total	Female	190	3.6995	.75776	-2.208	.01

The study examined the differences in the use of metacognitive reading strategies between male and female students. The results indicate that female students consistently reported higher mean scores across all three strategy categories (Global, Problem-Solving, and Support Strategies) compared to male students.

For **Global Strategies**, female students had a mean score of **3.56** (SD = **0.75**), while male students had a mean score of **3.40** (SD = **0.83**). The **t-test** results (-1.615, p = 0.05) suggest that this difference is **not statistically significant**, indicating that both genders used global strategies at a similar level.

In **Problem-Solving Strategies**, female students had a higher mean (3.59, SD = 0.79) than male students (3.39, SD = 0.80). The **t-test** results (-1.983, p = 0.02) indicate a **statistically significant difference**, suggesting that female students employed problem-solving strategies more frequently than their male counterparts.

For **Support Strategies**, female students reported a mean of **3.96** (SD = **0.84**), whereas male students had a mean of **3.67** (SD = **0.86**). The **t-test** results (-2.671, p = 0.04) indicate a **statistically significant difference**, implying that female students were more likely to use support strategies, such as note-taking and underlining, than male students.



The **total mean scores** for metacognitive strategy use further reinforce this trend, with female students scoring 3.70 (SD = 0.76) and male students scoring 3.49 (SD = 0.78). The **t-test** results (-2.227, p = 0.01) indicate a **significant overall difference**, suggesting that female students demonstrated greater overall engagement with metacognitive reading strategies compared to male students.

These findings suggest that gender may play a role in the frequency and preference of metacognitive strategy use in English reading comprehension. The results highlight the need for targeted instructional approaches to support male students in developing their metacognitive awareness and strategy application.

5. Discussion of the Findings

Research Results and Discussion

This study focused on main point: to investigate what metacognitive strategies the Thai high school students use in their English reading comprehension. The total number of participants were 285 students high school students in Prakhonchai District, Buriram Province. The data for the study were derived from these sources, namely the MARSIS and semi-structure interviews. In the interview, open-ended questions were used as guidelines for each participant to investigate her and his reading strategies. The data from the questionnaire and interviews are consistency.

The study examined the use of metacognitive strategies in English reading comprehension, categorizing them into three primary types: Global Strategies, Problem-Solving Strategies, and Support Strategies. The overall mean score across all strategies was 3.49, with a standard deviation of 1.11, indicating a moderate level of metacognitive strategy use among participants.

1. Global Strategies

Global strategies, which involve planning and organizing the reading process, had an average mean score of 3.49 with a standard deviation of 1.09. Among the eight strategies in this category, the highest mean score was observed for "I take an overall view of the reading text to see what it is about before reading it" (M = 3.64, SD = 1.14), suggesting that many participants actively preview texts before reading. Additionally, "When reading text becomes difficult, I pay closer attention to what I am reading" (M = 3.63, SD = 1.14) also had a high mean score, indicating that



participants use focused attention to enhance comprehension. The lowest mean score was for "I analyze whether the content of the reading comprehension text fits my reading purpose" (M = 3.33, SD = 1.09), suggesting that fewer participants consciously evaluate content relevance before reading.

These findings align with previous research indicating that global strategies play a crucial role in reading comprehension by helping readers set goals and organize information effectively (Pressley & Afflerbach, 1995; Mokhtari & Reichard, 2002). According to Anderson (2002), skilled readers tend to engage in goal-setting before reading, which enhances their ability to comprehend texts efficiently.

2. Problem-Solving Strategies

Problem-solving strategies, which help readers regulate their comprehension when encountering difficulties, had the highest overall mean score of 3.51 and a standard deviation of 1.12. The most frequently used strategy in this category was "When I read, I guess the meaning of unknown words or phrases" (M = 3.62, SD = 1.11), reflecting an active approach to inferring word meanings from context. Similarly, "I read slowly and carefully to make sure I understand what I am reading" (M = 3.58, SD = 1.08) was also commonly used. Conversely, "I adjust my reading speed according to what I am reading" (M = 3.40, SD = 1.11) received the lowest mean score, suggesting that readers may not frequently adapt their pace based on text complexity.

This is consistent with the findings of Sheorey and Mokhtari (2001), who found that proficient readers frequently use problem-solving strategies to monitor and adjust their comprehension processes. Furthermore, Carrell (1989) emphasized that readers who actively engage in comprehension monitoring are more successful in understanding complex texts.

3. Support Strategies

Support strategies, which assist readers in maintaining focus and reinforcing learning, had an overall mean score of 3.48 with a standard deviation of 1.12. The most frequently used strategy in this category was "I underline or circle information in the reading comprehension text to help me remember it" (M = 3.81, SD = 1.18), highlighting the importance of annotation in comprehension. Additionally, "I try to picture or visualize information to help remember what I read" (M = 3.79, SD = 1.07) was another common technique. On the other hand, "Take notes



while reading text to help me understand what I read" had the lowest mean score (M = 3.02, SD = 1.15), indicating that note-taking is less frequently employed as a comprehension aid.

These findings support previous studies by Oxford (1990) and Chamot (2005), which highlight that learner who actively engage in support strategies, such as annotating and summarizing, tend to retain information more effectively. However, the lower usage of note-taking aligns with Zhang and Seepho (2013), who found that learners often underutilize this strategy despite its benefits in comprehension retention.

Overall Findings

The results indicate that participants use metacognitive strategies moderately when reading English texts, with problem-solving being the most common, followed by global and support strategies. High standard deviations indicate varied usage. These results suggest the need for targeted instruction to boost metacognitive awareness and reading proficiency, supporting Flavell's (1979) emphasis on metacognition's key role in comprehension.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

- Enhancing Awareness of Global Strategies: Educators should provide explicit instruction on goal-setting and text organization techniques to help learners improve their comprehension planning skills.
- 2. Encouraging Active Problem-Solving: Learners should be trained to use problem-solving strategies, such as adjusting reading speed and rereading challenging texts, to enhance their comprehension regulation.
- **3.** Promoting the Use of Support Strategies: Strategies like note-taking, visualization, and paraphrasing should be reinforced through classroom activities and reading exercises to help students retain and understand information effectively.
- 4. Developing Metacognitive Strategy Training Programs: Educational institutions should incorporate metacognitive training into reading curricula to foster independent and strategic readers.
- 5. Utilizing Digital and Visual Aids: The integration of digital tools, such as annotation software and interactive reading platforms, can support learners in applying metacognitive strategies more effectively.



6. Conducting Further Research: Additional studies should explore how different proficiency levels and learning styles influence metacognitive strategy use in English reading comprehension. By implementing these recommendations, learners can develop stronger metacognitive skills, leading to improved reading comprehension and overall language proficiency.

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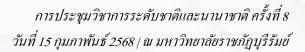
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Current Situation of Teaching Competence of Teachers in Zhejiang Higher Vocational College, People's Republic of China

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Abstract

This study investigates the current situation of teaching competence of higher vocational college teachers in Zhejiang Province, People's Republic of China. The sample group compose of 384 full-time teachers from 18 higher vocational colleges in Zhejiang Province. The data is collected through a questionnaire survey, which was divided into two parts: the first part was the basic information of the survey objects; The second part was to investigate the 21st century teaching competence of Zhejiang higher vocational colleges teachers. A 5-level scoring scale was used to display the results of the questionnaire. The Cronbach Alpha coefficient of the questionnaire was 0.945, and the consistency was between 0.60 and 1.00, which met the requirements of statistical validity. The analysis of the questionnaire involves $mean(\bar{x})$ and standard deviation(S.D.). The teaching competence level of teachers in Zhejiang higher vocational college was high. Through various analytical methods, it was found that the average level of research competence among higher vocational colleges teachers is the highest, followed by the competence level in student management, professional ethics, self-sustained development competence, social service competence, and classroom teaching competence.

Keyword: Higher vocational college, Teaching competence



1. Introduction

According to the Vocational Education Law of the Republic of China, efforts should be made to establish a higher vocational education system that meets the national conditions and characteristics of the Republic of China, ensuring the integration of pre-employment and post-employment training, making primary, secondary, and higher vocational and technical education and training interconnected, and promoting communication and coordinated development with general education and adult education. Higher vocational education is a very important component of the higher education system of China, capable of connecting general undergraduate education with adult continuing education, and is an educational organizational form that maximally integrates educational technology with the latest developments in industry and enterprise development. (Ministry of Education. 2019:1)

In 2010, the National Medium-and Long-Term Education Reform and Development Plan (2010-2020) pointed out that teaching should be the primary content in teacher evaluations, and the comprehensive implementation of the undergraduate teaching quality and teaching reform project in higher education institutions should be carried out. Strengthening the professionalization of the teaching staff is fundamental to education. With good teachers, there can be good education. This indicates that the development of teachers teaching competence is a matter of great importance for the government in developing a modern education system. (Ministry of Education. 2018:1)

The official document issued by the People's Republic of China Education in 2021: The Guiding Opinions on Deepening the reform of the professional title system of teachers in colleges and Universities pointed out that while "overcoming the only thesis, academic qualification, award and project", it is necessary to "highlight the ability and performance of education and teaching." Colleges and universities should take conscientiously performing the duties of education and teaching as the basic requirement for evaluating teachers. Strengthen teaching quality evaluation, take classroom teaching quality as the main standard, strict teaching workload, strengthen teaching assessment requirements, and improve the proportion of teaching performance and teaching research in the evaluation ", which strengthens the important position of teaching ability in the evaluation of university titles. At present, the research results on the evaluation of college teachers'



teaching ability are relatively few, and there is no ready evaluation system of college teachers' teaching ability with universal applicability. (Ministry of Education. 2021: 1)

China's Education Modernization 2035 puts forward a clear goal for building a team of teachers: building a team of high-quality, professional and innovative teachers. We should vigorously strengthen the construction of teachers' ethics, take teachers' ethics as the first standard for evaluating teachers' quality, and promote the long-term and institutionalized construction of teachers' ethics. We will improve the teacher qualification system and access system. Cultivate a team of high-quality teachers, and improve an open, coordinated and interconnected teacher education system with Chinese characteristics, with normal colleges as the main body, high-level non-normal colleges participating, and high-quality primary and kindergartens as practice bases. Strengthen the organic link between pre-service teacher training and post-service teacher development. We will consolidate the professional development system for teachers and promote their lifelong learning and independent professional development. We will increase the commendation of teachers and strive to improve their political, social and professional status. (People's Government of the People's Republic of China, 2019: 1)

Therefore, in-depth discussion and research on the current status of teaching competence of higher vocational teachers in Zhejiang Province has very important theoretical and practical significance. How to develop the teaching competence of higher vocational teachers in the digital economy era is a research topic that needs to be paid attention to by higher education researchers. The research results can provide guidance for teacher education in higher vocational colleges and will promote the development of higher vocational education in Zhejiang Province in a more advanced and scientific direction. Let teachers play the social service role of teaching and promote the diversified development of social productivity.

2. Objective

To investigate the current situation of teaching competence of higher vocational college teachers in Zhejiang Province, People's Republic of China.



3. Research Methodology

3.1 Population and sample

The present situation of teaching competence of teachers in higher vocational schools in Zhejiang Province is investigated, and opinions are sought from those who actively participate in the training of teachers' teaching competence.

- 1. Population consists of higher vocational college teachers in 35 colleges in Zhejiang, with the number of teachers 14000 people, People's Republic of China.
- 2. The sample group consisted of 384 higher vocational college teachers at 18 colleges in Zhejiang, People's Republic of China. The sampling method was as follows:
- Step 1: Randomly select at least 50 percent of the number of higher vocational college in Zhejiang Province from every city.
- Step 2: Determine the sample size of higher vocational college teachers, by opening the Krejcie and Morgan tables (Krejcie & Morgan. 1970: 608 610), the sample size was 384 people.

3.2 Data Collection Tool

The tool used in this research was a questionnaire, which the researcher created divided into 2 parts, consisting of:

Part 1: General information of the respondents, data collected through a checklist questionnaire.

Part 2: To study the current situation of teaching competence for higher vocational college teachers in Zhejiang, People's Republic of China, using a 5-level rating scale questionnaire to collect data. Cronbach Alpha coefficient test and item objective congruence index (IOC) were used to test the reliability of the questionnaire. The Cronbach Alpha coefficient of the questionnaire showed a high internal consistency 0.945, and the item objective consistency index was 0.60 - 1.00. Therefore, it is considered a reliable tool.

3.3 Data Analysis

According to the mean and standard deviation analysis (Srisa-ard, Boonchom. 2002: 90-92), and the classification of the data as presented, define the average is as follows:

- 4.51-5.00 Teaching competence is at the highest level
- 3.51-4.50 Teaching competence is at a high level



- 2.51-3.50 Teaching competence at an appropriate level
- 1.51-2.50 Teaching competence is at a low level
- 1.00-1.50 Teaching competence is at the lowest level

4. Results

According to the opinions of teachers, the current situation of teaching competence of higher vocational college in Zhejiang, People's Republic of China. For details, see Table 1 to Table 7.

Table 1

The overall and each dimension's average and standard deviation about teaching competence of teachers in Zhejiang higher vocational colleges

Item	Teaching Competence of Teachers	x	S.D.	Interpretation	Rank
1	Teachers' professional ethics	3.57	1.23	High	3
2	Teachers' teaching management competence	3.51	1.26	High	6
3	Teachers' self-development competence	3.53	1.24	High	5
4	Teachers' scientific research competence	3.59	1.18	High	1
5	Teacher's competence to manage students	3.58	1.21	High	2
6	Teachers' social service competence	3.55	1.22	High	4
	Average	3.56	1.22	High	

According to table 1 teachers' opinions on the teaching competence of Zhejiang higher vocational colleges are at a relatively high level, among which the average score of teachers' scientific research competence is the highest ($\mathbf{x} = 3.59$), followed by student management competence ($\mathbf{x} = 3.58$), and the average score of classroom teaching competence is the lowest ($\mathbf{x} = 3.51$).



Table 2

Average and standard deviation about Teachers' professional ethics, the dimension of teaching competence of higher vocational college in Zhejiang, People's Republic of China.

Item	Teaching Competence of Teachers	x -	S.D.	Interpretation	Rank
1	Maintain a high degree of enthusiasm for the teaching profession and be loyal to the country	3.59 1.27		High	4
2	Teachers are committed to teaching for their students' learning	3.52	1.24	High	9
3	Teachers can follow social morality and constantly develop their qualities to become good role models	3.60	1.25	High	3
4	Teachers think about teaching from the perspective of students and treat others with professional ethics	3.64	1.18	High	1
5	Teachers are responsible for managing and controlling students' learning	3.52	1.22	High	10
6	Teachers have good moral character and are role models for students	3.55	1.23	High	6
7	The teachers are selflessly committed to taking care of their students	3.53	1.25	High	8
8	Teachers treat all students in the class fairly and promote their growth and success	3.54	1.27	High	7
9	Teachers use the normative standards to evaluate the students	3.63	1.22	High	2
10	Teachers consistently adhere to the standards of ethical conduct	3.56	1.22	High	5
	Average	3.57	1.24	High	

According to table 2, it was found that the level of professional ethics in teaching competence is generally at a high level ($\bar{x} = 3.57$). With the highest average proportion, item 4 teachers think about teaching from the perspective of students and treat others with professional



ethics ($\bar{x} = 3.64$), followed by Item 9 teachers use the normative standards to evaluate the students using unified standards to evaluate students ($\bar{x} = 3.63$). The lowest item is Item 5 teachers are responsible for managing and controlling students' learning ($\bar{x} = 3.51$).

Table 3

Average and standard deviation about Teachers' teaching management competence, the dimension of teaching competence of higher vocational college in Zhejiang, People's Republic of China.

Item	Teaching Competence of Teachers	x -	S.D.	Interpretation	Rank
11	Teachers have general and specific abilities in teaching design to inspire students' learning	3.53	1.28	High	3
12	Teachers are competent in classroom teaching and organizational work	3.46	1.30	appropriate	9
13	Teachers possess observational skills, memory, imagination, and analytical thinking and so on	3.51	1.25	High	6
14	Teachers can systematically handle teaching content	3.56	1.19	High	1
15	The teacher is proficient in basic foreign language communication skills	3.50	1.25	appropriate	7
16	Teachers have the ability to plan and design a variety of teaching materials	3.49	1.26	appropriate	8
17	Teachers should apply modern scientific and technological concepts to appropriately assist the teaching process	3.52	1.251	High	4
18	Teachers organize students' classroom learning behavior around the goal of classroom teaching	3.42	1.3	appropriate	10
19	Teachers using a teaching method that combines theory and practice, focusing on blended learning	3.54	1.31	High	2
20	Teachers have tried many ways to continuously ensure the results of classroom teaching	3.52	1.22	High	5
	Average	3.51	1.26	High	

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According to table 3, it was found that the level of teaching management competence in teaching competence is generally at a high level $(\bar{x} = 3.51)$. With the highest average proportion, item 14 teachers can systematically handle teaching content $(\bar{x} = 3.56)$, followed by item 19 teachers using a teaching method that combines theory and practice, focusing on blended learning $(\bar{x} = 3.54)$. The lowest item is Item 18 Teachers organize students' classroom learning behavior around the goal of classroom teaching $(\bar{x} = 3.42)$.

Table 4

Average and standard deviation about Teachers' self-development competence teaching

management competence, the dimension of teaching competence of higher vocational college in

Zhejiang, People's Republic of China.

Item	Teaching Competence of Teachers	_ x	S.D.	Interpretation	Rank
21	Teachers continuously increase their knowledge	3.50	1.24	appropriate	7
22	Teachers can actively update their existing professional knowledge system	3.53	1.24	High	5
23	Teachers actively engage in professional development activities to enhance your teaching abilities	3.60	1.25	High	2
24	Teachers regularly improve their teaching knowledge and enhance the quality of teaching	3.54	1.23	High	4
25	The teacher observes a colleague's sample class to learn from their strengths	3.53	1.26	High	6
26	Teamwork and communication are methods that help develop teaching abilities	3.57	1.19	High	3
27	Teachers can use artificial intelligence technology to help teachers solve complex teaching situations	3.61	1.29	High	1
28	Teachers have good personal qualities and professional spirit, communication skills, and confidence	3.49	1.24	appropriate	8
29	Teachers regularly participate in training and academic	3.41	1.25	appropriate	9



Item	Teaching Competence of Teachers	x	S.D.	Interpretation	Rank
	seminars to continuously improve oneself				
	Average	3.53	1.26	High	

According to table 4, it is found that teachers' competence in self-development is at a high level, with an average score of 3.53. With the highest average proportion, Item 27 teachers can use artificial intelligence technology to help teachers solve complex teaching situations ($\bar{x} = 3.61$), followed by item 23 teachers actively engage in professional development activities to enhance your teaching abilities ($\bar{x} = 3.60$). The lowest item is item 29 Teachers regularly participate in training and academic seminars to continuously improve oneself ($\bar{x} = 3.41$).

Table 5

Average and standard deviation about Teachers' scientific research competence, the dimension of teaching competence of higher vocational college in Zhejiang, People's Republic of China.

Item	Teaching Competence of Teachers	x -	S.D.	Interpretation	Rank
30	The teacher reviews teaching achievements in the classroom, summarizes teaching experience to conduct research	3.57	1.21	High	7
31	The group discussed various issues and held a research seminar	3.57	1.18	High	8
32	Teachers have the skills to think independently and create research results	3.66	1.16	High	2
33	Teachers have ability to understand and utilize curriculum knowledge to conduct research	3.59	1.17	High	6
34	Teachers have scientific concepts and ways of thinking to develop scientific research	3.57	1.21	High	9
35	Teachers can use their research capabilities to solve national-level research problems	3.61	1.22	High	4



Item	Teaching Competence of Teachers	x x	S.D.	Interpretation	Rank
36	Teachers can develop both teaching and research well	3.55	1.21	High	10
37	Teachers can help the school obtain scientific research funding	3.65	1.23	High	3
38	Teachers possess the skills to write and publish research articles	3.69	1.14	High	1
39	The results of teachers' research can serve the society and help schools obtain educational resources	3.61	1.14	High	5
	Average	3.59	1.18	High	

According to table 5 that teachers' views on the status of scientific research competence. Overall, each item is at a high level $(\bar{x} = 3.59)$. The item with the highest average is the 38th teachers possess the skills to write and publish research articles $(\bar{x} = 3.69)$, followed by the 32th teachers have the skills to think independently and create research results $(\bar{x} = 3.66)$. The lowest item is Item 36: Teachers can develop both teaching and research well $(\bar{x} = 3.55)$.

Table 6

Average and standard deviation about Teachers' student management competence, the dimension of teaching competence of higher vocational college in Zhejiang, People's Republic of China.

Item	Teaching Competence of Teachers	x	S.D.	Interpretation	Rank
40	Teachers care about and respect the individual differences of students	3.62	1.23	High	1
41	Teachers have a strong influence, impacting students and building close relationships between teachers and students	3.56	1.25	High	9
42	Teachers encourages students to study cutting-edge technologies and use artificial intelligence techniques to achieve personalized teaching	3.57	1.24	High	7
43	Teachers specialize in researching science and	3.55	1.23	High	10



Item	Teaching Competence of Teachers	x	S.D.	Interpretation	Rank
	technology, and impart knowledge and skills to students				
44	Teachers design instruction through interaction between teachers and students	3.57	1.23	High	8
45	Teachers takes measures to motivate students who are underperforming in class	3.61	1.20	High	2
46	Teachers observe and listen to students' opinions, inspiring students' creativity	3.58	1.18	High	6
47	Teachers can guide students to discover effective learning methods	3.61	1.21	High	3
48	Encourage students to take effective measures to improve their academic performance	3.61	1.22	High	4
49	The teacher analyzes the students' knowledge structure, creates a classroom environment using an integrated approach, and provides students with opportunities to build their own knowledge in order to improve their learning efficiency.	3.55	1.21	High	11
50	The teacher allows students to experience learning outside the classroom to improve life skills	3.59	1.18	High	5
	Average	3.58	1.21	High	

According to table 6 shows the views of administrators and teachers on student management. Overall, each item is at a high level. The Item with the highest average percentage is the 40th teachers care about and respect the individual differences of students (\bar{x} = 3.62). Followed by the 45th Teachers takes measures to motivate students who are underperforming in class (\bar{x} = 3.61). The lowest item is Item 49: the teacher analyzes the students' knowledge structure, creates a classroom environment using an integrated approach, and provides students with opportunities to build their own knowledge in order to improve their learning efficiency (\bar{x} = 3.55).



Table 7

Average and standard deviation about Teachers' Social service competence, the dimension of teaching competence of higher vocational college in Zhejiang, People's Republic of China.

Item	Teaching Competence of Teachers	x -	S.D.	Interpretation	Rank
	Teachers play an important role in participating in				
51	social activities, and solving problems can become a		1.26	High	5
	driving force for social progress.				
	Teachers extends the learning outcomes to the				
52	community surrounding the school, guiding students in	3.55	1.19	High	4
32	communicating their learning between teachers, parents,	3.33	1.19	Tilgii	_
	business departments, and administrators.				
	Teachers play an important role in serving society,				
53	passing knowledge to learners in society as a new way	3.56	1.21	High	3
	of social learning				
54	Teachers can solve students' employment issues,	3.58	1.23	High	2
34	providing more job opportunities for students	3.36	1.23	Tilgii	2
55	Teachers spread the essence of advanced culture, then	3.61	1.23	TT: 1	1
33	impart it to students, influencing social culture	3.01	1.23	High	1
56	Teachers provides campus resources and services for	3.46	1.22	appropriate	8
30	the community college	3.40	1.22	арргорпасе	0
57	Teachers cultivate graduates based on social needs	3.53	1.27	High	7
	Teachers engage in social research based on				
58	government policies and propose solutions to real-life	3.54	1.18	High	6
	problems				
	Average	3.55	1.22	High	

According to table 7 shows the views of administrators and teachers on teacher's social service competence. The Item with the highest average percentage is the 55th teachers spread the essence of advanced culture, then impart it to students, influencing social culture (\bar{x} = 3.61).



Followed by the 54th teachers can solve students' employment issues, providing more job opportunities for students ($\bar{x} = 3.54$). The lowest item is Item 56: teacher provides campus resources and services for the community college ($\bar{x} = 3.46$).

5. Discussion and Conclusion

Through the research on current situation of teaching competence of the teachers in Zhejiang vocational colleges in the People's Republic of China, it is found that the level of teachers' teaching competence is in a relatively high position. Through the analysis of each aspect, it is found that the average level of teachers' scientific research competence is the highest, followed by student management competence, professional ethics, self-development competence and social service competence, and the average score is the lowest of teachers' competence in teaching management.

This result is consistent with that of Quan, Shoujie. & Chen, Xianghan (2023: 88). The teaching competence of teachers in higher vocational colleges of the People's Republic of China includes the following contents: 1. Teachers' professional ethics, 2. Teaching management, 3. Teachers' self-development competence 4. Scientific research ability of teachers, 5. Student management competence, 6. Social service competence. The evaluation index system of teaching competence of university teachers is researched and designed. The first-level index includes four dimensions: knowledge literacy, teaching ability, professional character and personality trait; the second-level index includes 12 dimensions: educational knowledge, subject knowledge, general knowledge, information literacy, teaching design, teaching implementation, teaching research, professional attitude, professional emotion, professional pursuit, self-characteristics and interpersonal characteristics. These specific teaching competence contents, from the practical survey results, found that vocational teachers have been greatly trained in scientific research, teachers are generally able to carry out theoretical analysis of teaching phenomena, can independently write high-quality education papers, and achieve more teaching research results. However, the competence of classroom teaching has rarely been paid attention by scholars.

In addition, it is found that teachers are the least competent in classroom teaching management, which may be because too much attention is paid to training teachers' scientific research literacy and the importance of teaching is ignored. This result is consistent with the



results of Ma Xinqun's study (2022: 16-22): The training of teachers' teaching competence is the weakest in practice. For example, the form and content of teacher training are imperfect, emphasis is placed on the training of teachers' academic qualifications and professional knowledge, while the training of teachers' teaching practice is ignored, and the development of teachers' professional quality and teaching skills are ignored. The pre-job training of teachers is unreasonable, and there are problems such as emphasizing the examination of forms and neglecting the training of teachers' professional quality. Emphasis on short-term training effect, lack of long-term training plan. In view of the current situation of teachers' teaching competence, this paper puts forward effective suggestions on the development of teachers' classroom teaching competence, which is of great significance to the long-term development of Zhejiang higher vocational schools, and can provide references for higher vocational colleges to build quality teachers and enhance the comprehensive social influence.

In conclusion, our study contributes to a more comprehensive understanding of the current situation of teaching competence of teachers in higher vocational colleges in Zhejiang, the People's Republic of China, provides reliable and valid insights, and broadens the theoretical and practical research on teaching competence of teachers in higher vocational colleges.

6. Suggestion

As for future research, this study intends to adopt the research methods of interview and sampling, and select 10 excellent educational administrators and 10 excellent teachers who have won the award of teaching skills competition from 18 sample schools to conduct in-depth interviews. The Development Guide of Teachers' Teaching Competence is of great significance to the planning, promotion, monitoring and evaluation of teachers' teaching in Zhejiang higher vocational colleges and related institutions.



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Self-Directed Learning on Chinese University Students' Reading Comprehension Skills: A Synthesis Study

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Abstract

This synthesis study explores the role of Self-Directed Learning (SDL) in enhancing the reading comprehension skills of Chinese university students. SDL, characterized by autonomy, motivation, goal setting, self-assessment, and resource management, enables learners to take control of their educational journey, making it particularly relevant for language acquisition and reading proficiency. Through an extensive review of existing research, this study examines how SDL facilitates the development of key cognitive and metacognitive strategies that improve reading comprehension. SDL encourages students to choose reading materials that align with their interests and proficiency levels, fostering motivation and engagement while promoting independent strategy development such as previewing, questioning, and summarizing. The findings highlight the importance of autonomy and metacognitive awareness in improving reading skills, suggesting that students who engage in SDL are better equipped to tackle complex texts and develop critical thinking. Furthermore, the integration of self-assessment practices in SDL promotes a reflective learning process, allowing students to continuously monitor and adjust their reading strategies. This study underscores the potential of SDL in fostering long-term academic



success and lifelong learning, particularly in the context of second language acquisition and reading comprehension.

Keyword: self-directed learning, reading comprehension skills, synthesis study

Introduction

Self-directed learning (SDL) allows individuals to take control of their learning by emphasizing autonomy, goal setting, motivation, self-assessment, and resource management. As lifelong learning becomes increasingly important, SDL encourages learners to engage actively with their education, design personalized learning paths, and commit to their goals over time. It enables learners to access a range of resources—including teachers, peers, books, and technology—helping them tailor their learning experiences to their needs and interests.

In the context of English language learning, SDL plays a crucial role in developing reading skills. It encourages learners to choose reading materials that match their level and interests, which boosts motivation and engagement. SDL also promotes the development of independent reading strategies, such as previewing, questioning, inferring, and summarizing, allowing learners to tailor their approach to comprehension and meaning-making. Furthermore, SDL encourages self-reflection, enabling learners to assess their progress and improve their reading comprehension.

Reading serves a variety of purposes, including cognitive development, personal growth, academic achievement, socialization, and entertainment. It enhances cognitive abilities by helping learners grasp deeper meanings beyond the literal text, improving decision-making and reasoning. The transactional theory of reading (Rosenblatt, 1988) highlights the emotional and reflective aspects of reading, while fiction offers a means to manage stress, anxiety, and trauma. In sum, SDL in reading fosters critical thinking, emotional intelligence, and lifelong learning.

Self-directed learning (SDL) enables individuals to take control of their learning through autonomy, goal setting, motivation, self-assessment, and resource management. It encourages lifelong learning by allowing learners to design personalized learning paths and engage actively with their education. SDL gives learners access to a variety of resources, such as teachers, peers,



books, and technology, allowing them to adapt their learning experience to their needs and interests.

In the context of English language learning, SDL is especially important for developing reading skills. It encourages learners to select reading materials that match their proficiency and interests, boosting motivation and engagement. SDL also helps learners develop independent reading strategies—such as previewing, questioning, inferring, and summarizing—that improve comprehension and meaning-making. Additionally, SDL fosters self-reflection, enabling learners to assess their progress and improve their reading skills over time.

Reading serves multiple purposes, such as cognitive development, personal growth, academic achievement, socialization, and entertainment. It improves cognitive abilities by helping learners understand deeper meanings beyond the literal text, enhancing decision-making and reasoning. The transactional theory of reading (Rosenblatt, 1988) emphasizes the emotional and reflective aspects of reading, while fiction helps manage stress and anxiety. Overall, SDL in reading promotes critical thinking, emotional intelligence, and lifelong learning.

Reading comprehension is vital for academic success across all disciplines. Strong reading skills enable students to engage with complex texts, follow instructions, critically evaluate content, and perform well on standardized tests (Cain & Oakhill, 2004; Foorman et al., 2015). Beyond academics, comprehension plays a key role in lifelong learning and personal growth. Snow (2016) stresses that effective comprehension helps individuals stay informed, make decisions, and engage critically with the media and public discourse. Pressley (2002) emphasizes its importance in enabling self-directed learning by empowering individuals to interact with a wide range of materials, including newspapers, technical manuals, literature, and online content.

Comprehension also fosters critical thinking by enabling readers to identify biases, detect logical fallacies, and assess the reliability of information (Graesser et al., 1997). Moreover, it plays a significant role in social empowerment, as individuals with strong reading comprehension skills are better prepared to engage in societal issues and civic discourse (Freire, 1970, 2020). In today's digital age, navigating multimodal texts and evaluating online information requires strong comprehension skills, as they help individuals discern credible sources and avoid misinformation (Leu et al., 2013).



Self-directed learning (SDL) supports learners in taking control of their education, focusing on autonomy, goal-setting, motivation, and resource management. SDL enables personalized learning paths and encourages learners to assess their progress and make decisions about their learning. Goal setting enhances motivation and helps learners identify strategies for success, while self-initiated learning promotes independence and critical thinking. SDL empowers learners to engage actively in their education, adapt their strategies to meet their needs, and develop lifelong learning skills. This approach leads to deeper understanding and retention, helping learners build unique knowledge structures (Garrison, 1997).

The European Language Portfolio (ELP), introduced in 2001, has been widely adopted across Europe to promote self-directed learning and student autonomy. It provides a flexible and individualized approach to language learning by allowing students to document and reflect on their language skills and intercultural experiences. Self-assessment, a key feature of the ELP, helps students identify their strengths and weaknesses, fostering a sense of ownership over their learning process. This enhances motivation and engagement, making students more confident and proactive in their language learning, particularly in reading comprehension.

Research highlights that self-assessment encourages a more self-directed learning process. Afflerbach (2017) emphasizes its importance in boosting students' confidence, enabling them to view reading success as within their control. Murphy (2022) outlines three stages of assessment: dependent (relying on external evaluation), cooperative (using both self-assessment and external evaluation), and independent (fully relying on self-assessment). As students' progress through these stages, they become increasingly autonomous and self-reliant.

Self-assessment using the ELP promotes learner autonomy, improves motivation, and facilitates reflective learning. By integrating self-assessment early, students gradually develop independence and responsibility, enhancing their reading skills and fostering lifelong learning.

In the self-directed learning (SDL) process, learners take charge of deciding what they need to learn, selecting the resources and strategies for learning, and determining the criteria for evaluating their learning outcomes, particularly in acquiring specific skills and knowledge (Brookfield, 2009; Kim et al., 2014).

For many students, self-directed learning increasingly takes place online. Many students struggle to find appropriate resources, assess the relevance and scientific accuracy of information,



identify the relevant portions of these resources, and integrate multiple sources of information into their existing knowledge base—activities closely related to sensemaking (Quintana, Zhang, & Krajcik, 2005).

Purpose of the Research

To synthesize the self-directed learning on Chinese university students' reading comprehension skills.

Research methods

The study is a research analysis and related theory in the self-directed learning in the research articles of reading comprehension skills. The researcher reviewed the books and articles related to SDL within 10 years.

Research Results

The results from the synthesis of 11 previous studies, theories and related documents about the self-directed learning on Chinese university students reading comprehension skills are shown in Table 1 below.

Table 1
Strategies of Self-Directed Learning Used in Research

	Strategies of Self-Directed Learning/ Author& Year	Gong Sujuan 2014	Li Lizhen 2015	Huang Xuemei 2015	Zhao Yuanyuan 2016	Huang Huan 2017	Zhang Limei 2018	Wu Juan 2018	Wang Wenfeng 2018	Song Xiaofei 2019	Chen Ping 2022	Yan Hao 2023	Liu Caihong 2024	Frequency	Percentage	Rank
No		1	2	3	4	5	6	7	8	9	10	11	12			
1	Autonomy strategy	$\sqrt{}$				$\sqrt{}$					$\sqrt{}$		$\sqrt{}$	5	41.67	1
2	Metacognitive Strategy			$\sqrt{}$	$\sqrt{}$			$\sqrt{}$		$\sqrt{}$				4	33.33	2
3	Cognitive Strategy						$\sqrt{}$		$\sqrt{}$			$\sqrt{}$		3	25.10 0	3
			Total								12	100.00				



Through literature research, autonomy is a key factor in determining how much time and effort an individual is willing to invest in learning materials. Meanwhile, cognitive and metacognitive strategies are considered essential tools for effectively engaging in self-directed learning (SDL).

Autonomy Strategy

The amount and quality of L2 input learners receive in classrooms are limited, making it essential for learners to seek L2 input beyond the classroom, where teachers or instructional resources may not be available. The challenges of teaching English as a foreign language led educators to explore alternative approaches, concluding that a self-directed program offering a variety of methodological and linguistic resources can help learners navigate any foreign language. Extensive evidence in the literature highlights that autonomy in second language (L2) learning is a key factor in L2 acquisition. Autonomy refers to the degree to which individuals perceive themselves as capable of learning and completing tasks. Self-directed learning (SDL) is also an effective method for learning English, as it enables learners to identify challenges more conveniently and efficiently by creating clear learning plans and finding suitable resources.

Metacognitive Strategy

Metacognition can help L2 learners become more autonomous in their language learning efforts. Metacognition is crucial for autonomous language learning, and therefore, teaching metacognitive strategies should be a priority in language classrooms. In fact, metacognitive strategy instruction is often a key component of programs designed to promote self-directed learning (SDL) among language learners. In the context of L2 listening comprehension, teaching metacognitive strategies can increase learners' motivation to listen in the L2, which, over time, would improve their L2 performance as they seek more listening input to advance their interlanguage development. There is a reciprocal relationship between the use of L2 metacognitive strategies and L2 self-confidence: higher self-confidence leads to more effective use of metacognitive strategies, which in turn enhances learners' self-efficacy in learning the L2.

Cognitive Strategy

Cognitive strategies are a crucial component of self-directed learning (SDL) programs in L2 teaching and learning. Learners who employ strategic approaches to L2 learning are more successful in both areas. Effective strategies help learners apply their acquired L2



knowledge to new learning and usage contexts—a core principle in SDL programs. A primary aim of such programs is to encourage learners to seek additional L2 input outside the classroom, either through instructional materials or direct communication in the L2. Acquiring effective learning strategies in L2 education can make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations. Cognitive strategies involve the specific skills and techniques learners use to process L2 input in real time.

L2 self-directed learning (SDL) is based on the idea that learners are active processors who utilize metacognitive and cognitive resources through the strategies they employ to seek or process L2 input. The effectiveness of these strategies directly correlates with their sophistication; the more advanced the strategies, the better they serve the learner's goals. Consequently, SDL programs are designed, in part, to help L2 learners develop a higher level of sophistication in their use of language learning strategies, leading to greater success in L2 acquisition.

Self-directed learning (SDL) offers significant advantages for language learners by promoting autonomy, leveraging technology, and fostering strategic thinking. By incorporating metacognitive and cognitive strategies, learners can enhance their language skills and achieve greater success in L2 acquisition. As SDL encourages independence and active engagement, it plays a vital role in lifelong learning and personal growth.

Conclusion

Based on the findings of this study, several key components of self-directed learning (SDL) for second language (L2) acquisition emerge. These components underline the critical role of autonomy, metacognitive strategies, and cognitive strategies in enhancing the effectiveness of L2 learning. The research reveals that SDL is a powerful approach to language acquisition, providing learners with the tools and motivation necessary for successful language learning in a variety of contexts.

Autonomy Strategy

Autonomy plays a crucial role in L2 acquisition, as it enables learners to take control of their own learning process. The study highlights that L2 learners, especially in foreign language contexts, are often limited by the amount and quality of input they receive in the classroom.



Autonomy allows learners to seek additional language input outside the classroom environment, thus creating a more dynamic and flexible learning experience. By fostering autonomy, learners become more self-sufficient, able to set learning goals, identify challenges, and find suitable resources that cater to their needs. This autonomy empowers learners to engage in continuous self-directed learning, improving their L2 proficiency over time. The research supports the growing body of evidence that autonomy is a key factor in successful language acquisition, facilitating more effective learning through self-regulation. The finding is in line with Gong, S.J. (2014); Li, L.Z. (2015); Huang, H. (2017); Chen, P. (2022); Liu, C.H. (2024).

Metacognitive Strategy

Metacognition is a foundational element of self-directed learning, and it is closely linked to learners' ability to monitor and regulate their language learning processes. The findings indicate that teaching metacognitive strategies in L2 classrooms can significantly enhance learners' ability to manage their own learning effectively. These strategies allow learners to plan, evaluate, and adjust their learning approaches, leading to greater self-efficacy and motivation. In the context of L2 listening comprehension, for example, learners who apply metacognitive strategies are more likely to seek out and engage with additional listening input, which in turn improves their language skills. The reciprocal relationship between metacognitive strategy use and L2 self-confidence is also evident, as increased self-confidence fosters better use of metacognitive strategies, reinforcing learners' ability to achieve their language learning goals. The finding is in line with Huang, X.M. (2015); Zhao, Y.Y. (2016); Wu, J. (2018); Song, X.F. (2019).

Cognitive Strategy

Cognitive strategies are essential for facilitating the processing of L2 input and applying acquired knowledge in new contexts. The research emphasizes that cognitive strategies help learners engage with L2 materials effectively, making language learning more efficient and enjoyable. These strategies, such as summarizing, inferring meaning, and translating, enable learners to handle complex linguistic tasks, thus improving their language skills. Effective cognitive strategy use is directly linked to the success of SDL programs, which aim to develop learners' strategic thinking and problem-solving abilities in L2 contexts. The sophistication of these strategies determines how well learners are able to adapt and transfer their language skills to



different situations, demonstrating that more advanced cognitive strategies lead to better language outcomes. The finding is in line with Zhang, L.M. (2018); Wang, W.F. (2018); Yan, H. (2023).

Discussion

The research results underscore the importance of autonomy, metacognitive strategies, and cognitive strategies in fostering effective self-directed learning (SDL) for second language (L2) acquisition. The findings reveal that SDL not only promotes active engagement but also empowers learners by enhancing their ability to control their learning process, making the language learning experience more personalized and adaptable.

One of the key insights from the research is the pivotal role of autonomy in the success of L2 learners, particularly in foreign language contexts. By fostering autonomy, learners are encouraged to seek additional resources and engage in language use outside the classroom. This approach not only enhances their linguistic capabilities but also nurtures a sense of responsibility and control over their learning, which is essential for lifelong language acquisition. However, the challenge remains in ensuring that learners are equipped with the necessary skills and resources to navigate this self-directed approach effectively.

The integration of metacognitive strategies is another crucial element of SDL, as highlighted by the research. Metacognition, which involves the awareness and regulation of one's learning processes, allows learners to plan, monitor, and evaluate their language learning activities. The study found that metacognitive strategies significantly improve L2 learners' ability to assess their progress and adjust their approaches as needed. This leads to increased motivation and self-efficacy, creating a positive feedback loop where learners become more confident in their abilities. The reciprocal relationship between metacognitive strategy use and L2 self-confidence further reinforces the importance of fostering these strategies in L2 classrooms.

Cognitive strategies, which include techniques such as summarization, inferencing, and translation, are indispensable tools for engaging with L2 materials in a meaningful way. These strategies help learners process new information and apply it to real-life contexts, which is critical for deepening language acquisition. The research underscores that learners who employ cognitive strategies are more likely to engage with L2 content effectively and transfer their knowledge to



diverse situations. As SDL programs aim to develop learners' strategic thinking, the sophistication of these cognitive strategies directly influences their ability to succeed in L2 acquisition.

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Investigating the Integration of Digital Technology in Teaching English Vocabulary in Higher Education: A Systematic Review

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Abstract

This study aimed to investigate 1) research methodologies, 2) digital tools, 3) the challenges and opportunities that are found in using digital technology for English vocabulary learning by reviewing 40 domestic and international academic documents and research articles published from 2010 to 2022. A systematic review was employed, with Microsoft Excel 2019 serving as a research instrument. The documents and articles from the ThaiJo and ERIC database were screened by examining titles and abstracts. The findings suggested that the implementation of digital technology in EFL contexts is required to establish the impact of digital technologyintegrated classes on EFL students' English vocabulary learning. The study found that the most commonly employed research methodologies were quantitative, mixed methods, and qualitative, respectively while the most frequency digital tools used for comprehensively developing English vocabulary acquisition found from the samples were Quizlet, followed by Kahoot!, and Web 2.0 including blogs, social networking sites, respectively. The findings provided valuable challenges and opportunities that studies have identified in using digital technology for English vocabulary learning were these tools not only supported conventional teaching methods but also promoted students' learning process that included providing adequate trainings for teachers, ensuring appropriate technical infrastructure, and designing curriculum, creating an inclusive, effective, and sustainable learning environment that prepared students for the increasingly digital future of



education and communication. They also offered essential information for educators, researchers, policymakers, and stakeholders in the ELT community. Future research should further explore the long-term impact of digital technology-integrated classrooms and examine strategies for optimizing digital tools to maximize student engagement and vocabulary retention.

Keyword: technology, English vocabulary, ELT

1. Introduction

1.1 English language teaching and learning

English language teaching and learning has undergone significant transformation in recent years, particularly with the integration of digital technologies and innovative pedagogical approaches. Klimova (2021) highlights the critical role of technological interventions in enhancing language acquisition, emphasizing that digital tools have become essential in creating more interactive and personalized learning experiences. When the COVID-19 pandemic has accelerated this digital shift, it drives educators to reimagine traditional language teaching methodologies and embrace flexible, technology-mediated instructional strategies that support remote and hybrid learning environments. The evolving landscape of language education continues to prioritize learner-centered approaches that leverage adaptive technologies and data-driven interventions. According to Zhang and Zou (2022), they claim artificial intelligence and machine learning are increasingly being integrated into language learning platforms, enabling more sophisticated personalization and real-time feedback mechanisms. These technological innovations are not merely supplementary tools but are becoming fundamental to creating comprehensive, engaging, and effective language learning experiences that transcend traditional classroom boundaries.

1.2 Teaching English vocabulary in higher education

Teaching English vocabulary in higher education has become increasingly sophisticated, using digital technologies and cognitive approaches to enhance lexical acquisition and retention have dramatically raised nowadays. Alqahtani (2021) emphasizes the critical importance of strategic vocabulary instruction, highlighting that effective vocabulary learning extends beyond traditional rote memorization to more contextual and meaningful engagement. The integration of technology-enhanced learning platforms has revolutionized vocabulary instruction, providing



students with adaptive, personalized, and interactive approaches to lexical development that address individual learning needs and cognitive processing capabilities. Contemporary higher education vocabulary instruction is characterized by a multidimensional approach that combines cognitive linguistics, technological innovation, and learner-centered pedagogies. Advanced digital tools and artificial intelligence are reportedly revolutionizing vocabulary acquisition by providing immersive linguistic experiences, tailored learning paths, and real-time feedback (Chen and Lin, 2022). According to Zhai and Yue (2023), effective vocabulary teaching in higher education necessitates a comprehensive strategy that incorporates multimedia materials, contextual learning, and metacognitive techniques. Thus, the emerging paradigm focuses on developing not just lexical knowledge, but also strategic competence, enabling students to understand and manipulate vocabulary across various academic and professional contexts.

1.3 Digital technology

In today's educational environments, digital technology has become a disruptive force that is radically altering learning in a variety of fields. According to Kim and Lee (2021), they mention that digital technologies represent complex interconnected systems that enable modern information processing, communication, and interactive experiences through advanced computational mechanisms. These technologies transcend traditional boundaries, providing unprecedented opportunities for personalized, adaptive, and immersive learning environments that respond dynamically to individual learner needs and preferences. Supported by Chen et al. (2022), they emphasize that digital technologies are not just tools but complex educational environment that integrate artificial intelligence, and adaptive algorithms to create intelligent, responsive learning platforms that can analyze, predict, and customize educational experiences in real-time. Digital technology is distinguished by its multifaceted characteristics, which include scalability, accessibility, adaptability, and interactivity. Important technological aspects including real-time data processing, tailored learning paths, instant feedback mechanisms, and cross-platform integration (Zhang and Wang, 2023). These features enable learners to engage with content through multiple modalities, including multimedia resources, interactive simulations, and collaborative digital environments.



1.4 Digital technology in language learning

Language learning has undergone a significant transformation thanks to digital technology, which has produced unforeseen possibilities for immersive, customized, and flexible language experiences. Chen et al. (2022) stated that the introduction of sophisticated learning platforms that use artificial intelligence and interactive multimedia resources has transformed conventional language acquisition approaches. By overcoming geographical and educational barriers and offering personalized learning routes that adapt dynamically to students' cognitive capacities and performances, these technologies allow students to interact with language content in a variety of ways. Active, learner-centered, and technology-mediated educational experiences have replaced passive, instructor-centered pedagogical paradigms in language acquisition as a result of the incorporation of digital technologies. Therefore, digital technology for language learning can provide immersive learning environments and extensive linguistic support when it is characterized by complex, intelligent systems.

1.5 Purpose of the study

English vocabulary learning achievement in EFL depends on many variables. These variables can be the learning environment, teaching methods and techniques, and the learning materials. Thus, the purposes of this systematic review study are: 1) to identify employed methodologies, 2) to discover the most frequency digital tools used for comprehensively developing English vocabulary acquisition, 3) to investigate the challenges and opportunities that are found in using digital technology for English vocabulary learning. Thus, the following research questions guided this systematic review.

RQ1: Which research approaches are commonly used when integrating digital technology into the English vocabulary teaching?

RQ2: Which digital tools are most frequently used to develop English vocabulary?

RQ3: What challenges and opportunities have researchers identified in using digital technology for English vocabulary learning?

2. Methods

This study uses Wolfswinkel's (2013) five-step method, which is a grounded theory and enables a thorough search and analysis of the articles gathered from databases, to find digital



technology applications that can be incorporated into EFL classes to improve EFL students' language learning. This grounded theory method-based literature review was applied as a research methodology which are as follows: 1) identifying the scope of the study; 2) searching and selecting the database; 3) selecting the sample; 4) evaluating the sample; and 5) presenting the findings.

2.1 Step 1 Identifying the scope of the study

This step clarified journal articles needed to be empirical, published in English, integrated with digital technologies into EFL classes, focused on students' learning achievements, and published recently owing to the rapid evolution of digital technologies. This identified the most frequently digital technology used to enhance students' engagement in language learning.

2.2 Step 2 Searching and selecting the database

The next step was database search and selection, which were selected from the Thai-Journal Citation Index Centre (ThaiJo) and ERIC. The databases were chosen based on their contributions to language education and digital technology applications. Studies were selected by searching for suitable terms— TITLE-ABS-KEY ("English vocabulary" AND "digital technology" OR "technology" OR applications" OR "digital learning" OR "elearning" OR "virtual learning" AND "English teaching" OR "English language teaching" OR "ELT" OR "teaching English vocabulary" OR "learning English vocabulary" AND "higher education" OR "university" OR "graduate school" OR "Tertiary") in the articles' titles and abstracts. *2.3 Step 3: Selecting the sample.*

The third step involved selecting the final sample for analysis. The search was narrowed to include articles written in English. Additionally, the titles and abstracts of the articles were scrutinized for their relevance to digital technologies used to enhance EFL students' vocabulary knowledge. This resulted in the inclusion of 40 studies in the final analysis (Table 1).

Inclusion and Exclusion criteria

This study examined the integration of digital strategies in teaching English vocabulary in English classroom instruction in higher education. To specifically understand the integration of digital strategies in teaching English vocabulary, it included (1) quantitative and qualitative empirical studies that assessed original data on the integration of digital strategies in teaching English vocabulary in English classroom instruction and (2) studies involving students engaged in



higher education. Given this framework, the following inclusion and exclusion criteria were applied:

Table 1

The inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
• Listed in either ThaiJo or ERIC and published in a journal	• The study did not focus on using digital tools in teaching
after undergoing peer review.	English vocabulary in higher education.
 Conducted within the context of higher education. 	• The method used in the study did not align with using
	digital tools in teaching English vocabulary.
 Focused on digital strategies in teaching English vocabulary 	• The study was not empirical.
in English classroom instruction in higher education.	
• Be university students or teachers without specifying year of	• The participants did not study or work at a university.
university levels or teaching experience.	
 Be objects or materials used as research samples 	

Figure 1 displayed the PRISMA flow diagram, outlining the methodology employed for screening, analyzing and incorporating studies in the research. A total of 40 publications for the period between 2010 to 2022 were retrieved, as shown in Table 2 (Appendix), where 5 came from ThaiJo, 35 came from ERIC. The review only considers journal articles to guarantee a high level of research quality, as these articles normally go through a more rigorous peer-review procedure. For the 957 collected studies, the search focused on the abstracts to find the studies that addressed the research questions, which was because searching inside the text brings many studies that are not related. Finally, a total of 40 studies were considered. Figure 1 provided the detailed studies selection procedure as identified by Okoli (2015). Moreover, the figure also showed the number of studies used in the review based on the year of publication.

2.4 Step 4: Evaluating the sample

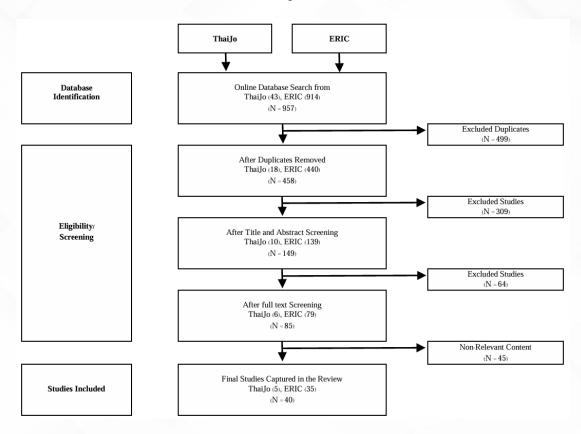
To evaluate the selected articles and papers, the author developed criteria, and the analysis was carried out using Microsoft Excel. In addition, the studies were organized into meaningful subcategories based on study purpose, the examined digital technology tools and applicability in



classes to learn EFL. Furthermore, the authors reviewed the methodology employed in each study and summarized the findings of the selected articles and papers to develop an adequate analytical framework. In addition, table 2 included the digital technologies utilized in EFL education to enhance teaching and learning English vocabulary.

Figure 1

PRISMA flowchart of detailed studies selection procedures (Okoli, 2015)



2.5 Step 5: Presenting the findings

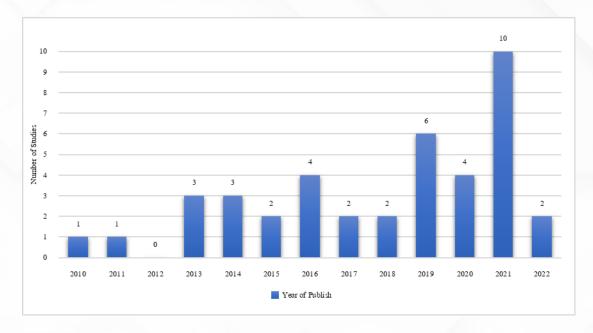
3. Results

From RQ1: Which research approaches are commonly used when integrating digital technology into the English vocabulary teaching?



Figure 2

The number of studies used in the review based on the year of publication.



According to figure 2, the number of studies used in this review was based on the year of publication between 2010 to 2022 has slightly increased. The studies in using digital tools in English Language Teaching context, especially English vocabulary, had been found from the beginning years. Additionally, a few years after the post COVID-19 pandemic era had been found that the use of technology played significant role in language teaching and researches in higher education staring from 6 studies in 2019, 4 studies in 2020 and the highest numbers of the study counted 10 studies in 2021. Based on this evidence, it can be mentioned that the COVID-19 pandemic has led to a huge increase in research about how to use digital tools and technology in ELT. For instance, Zhang and Lin (2023) examined how the pandemic transformed ELT practices in higher education, highlighting the rapid transition to online learning platforms and the subsequent need for developing digital literacy among both teachers and students. Zou et al. (2024) studied comprehensive analysis of artificial intelligence applications in ELT, which demonstrated how AI-enhanced learning environments can support personalized language acquisition and assessment. These developments have led to a growing body of research examining both the immediate responses to teaching and the long-term implications for technology integration in language education (Bailey & Lee, 2023).



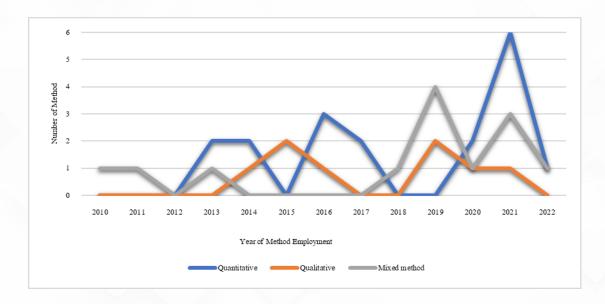
Table 3

The research methods employed in the studies

Method	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	Percentage
Quantitative				2	2		3	2			2	6	1	18	45.00%
Qualitative					1	2	1			2	1	1		7	17.50%
Mixed method	1	1		1					2	4	1	3	1	14	35.00%
Total	1	1	0	3	3	2	4	2	2	6	4	10	2	40	100.00%

Figure 3

Research method distribution



The research methodologies obtained from the samples were explained in Table 3 and Figure 3. With 18 (45%), they demonstrated that the quantitative approach was the most often used approach in the research. The mixed approach came in second with 14 (35%), and the qualitative approach came in last with 7 (17.50%). These results indicated that mixed-method quantitative approaches were significantly preferred over solely qualitative approaches in research integrating digital technology in teaching English vocabulary.

There has been a noticeable shift from primarily mixed-method and quantitative approaches to a stronger focus on qualitative approaches since 2019. Figure 4 provided a clear illustration of this trend, demonstrating a notable rise in the use of mixed and qualitative



methodologies. This change demonstrated how Thailand and other nations are beginning to recognize the value of the qualitative approach in the field of ELT. Interestingly, mixed-methods and quantitative approaches were about equally popular in 2022.

According to the above statements, why quantitative methods are more frequently used than qualitative approaches in English vocabulary teaching with digital tools because they provide measurable, objective, and statistically comparable data. Vocabulary acquisition is often assessed through standardized tests, pre- and post-assessments, and word recognition tasks, which align well with quantitative research. Additionally, digital tools generate large-scale data, such as time spent learning, word accuracy rates, and progress tracking, making it easier to analyze trends and effectiveness. Moreover, decision-makers and educators prefer quantitative evidence as it provides clear, data-driven insights into the effectiveness of digital vocabulary teaching tools, supporting informed decision-making. While qualitative research offers valuable perspectives on student experiences and engagement. However, combining both approaches in a mixed-methods study can provide a more comprehensive understanding of digital vocabulary instruction.

In addition, mixed-method had gained greater popularity than purely qualitative methods in ELT research for several key reasons and it also had become increasingly favored as Rodriguez et al. (2023) noted that it offered both breadth and depth in understanding complex educational phenomena, combining the statistical rigor of quantitative approaches with the rich contextual insights of qualitative methods while Wilson and Chang (2023) mentioned quantitative methods are preferred for their ability to provide generalizable results and statistical validity, particularly in studies involving large sample sizes and technology-enhanced learning environments. The preference for this method was further supported by Lee and Park (2024) who found that research funding bodies and high-impact journals tend to favor studies that include quantitative elements, as they were perceived to offer more concrete evidence for policy-making and pedagogical decisions.

For *RQ2*: Which digital tools are most frequently used to develop English vocabulary? Figure 4 illustrated that in 12 years of this systematic review found top-5 nations that conducted the highest numbers of research relating to using digital technology in English vocabulary teaching were from Asia including Thailand and Turkey, each found 9 studies equally, 23%, followed by Indonesia, 3 studies, 9%, 2 studies each or 5% from Malaysia, China, Iran and UAE,



respectively. Those studies indicated that multimedia presentations, and social networking platforms significantly improved student engagement and academic success, particularly among culturally diverse learners (Kumi-Yeboah et al., 2020). This trend reflected a broader shift towards e-learning and blended learning environments, which are increasingly favored in Asian educational contexts (National Taiwan Normal University, 2023). Due to some studies integrated more than one digital tool in conducting research, those 40 studies had indicated 47 empirical digital technology tools employing as research instruments that assisted and increased language learners' English vocabulary proficiency positively as shown in figure 5. It could be described that the 3-most popular digital tools in improving English vocabulary were *Quizlet*, 10% (5 studies), *Kahoot!*, 8.5% (4 studies), and *Web 2.0*, 4.2% (2 studies); the scholars that used Web 2.0 as their research tools had defined them as *blogs, wikis, folksonomies, social networking sites, blogs, Padlet.com, Flipgrid.com,* and *H5P.org*

The top three instruments utilized in the studies, arranged by country, were as follows: Quizlet was used in the study from Russia, Japan, Indonesia, Thailand, and Turkey. Webs 2.0 was utilized in research from Turkey (two studies) and the United Arab Emirates while Kahoot! was employed in Thailand, Turkey, and Kazakhstan.

Figure 4

Nations and numbers of employed digital tools in researches





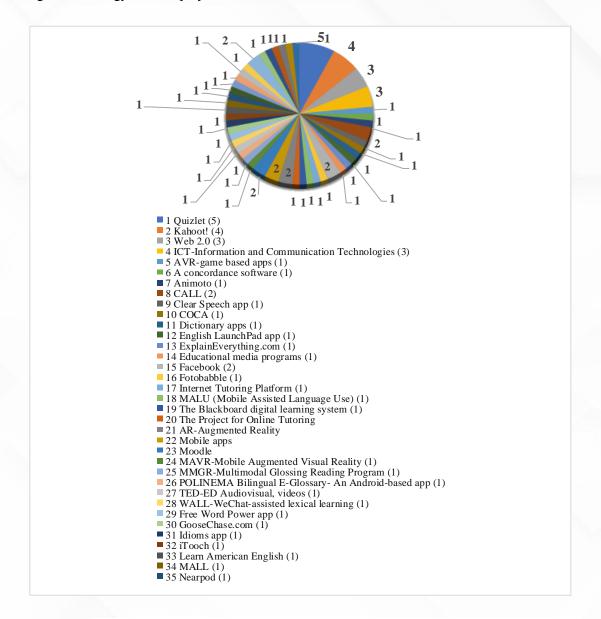
Quizlet, Kahoot! and Web 2.0 were widely used and popular, depending on the learners' environment. First, it has been demonstrated that Quizlet greatly enhances students' vocabulary learning performance and retention. According to a meta-analysis, Quizlet is a useful tool in language teaching settings since it can result in positive changes in learner attitudes and moderate gains in vocabulary acquisition (Özdemir & Seckin, 2024). According to Yilmaz & Yasar (2023), Quizlet also emphasized how gamified learning environments and interactive flashcards increase student enthusiasm and engagement, both of which are critical for language retention. Second, Kahoot!'s interactive, game-based learning environment greatly increased student enthusiasm and engagement, making it an effective tool for learning English. In fact, Kahoot! created a competitive environment that prompted engagement and provided immediate feedback, which improved student learning outcomes (Wichadee & Pattanapichet, 2018; Reynolds & Taylor, 2020; Michos, 2020). Third, because Web 2.0 improved learner engagement and offered chances for real-world language use in interactive and cooperative settings, it was very helpful for English language acquisition. Effective language acquisition required a more dynamic learning environment, enhanced communication skills, and learner autonomy, all of which were demonstrated by those studies (Shen, 2018; Dania & Adha, 2021; Thomas, 2009; Bataineh, 2020).

In conclusion, higher vocabulary retention, more engagement, and higher academic achievement could result from integrating Quizlet, Kahoot!, Web 2.0 tools, and others into English language learning practices. The results of several studies showed that integrating technology into language learning environments had a considerable positive influence, as shown in Table 2 (Appendix). Research continuously demonstrated that the use of digital tools improved student engagement and vocabulary acquisition (Aprilani, 2021; Durongbhandhu & Suwanasilp, 2021; Korkmaz & Öz, 2021). Studies have shown statistically significant gains in reading comprehension and vocabulary retention following the use of mobile applications and multimedia resources, which have resulted in noteworthy improvements in learning success (Thongchu et al., 2022; Chavangklang et al., 2019). Digital learning servers and web-based teaching models have shown exceptional efficacy, with efficiency values surpassing benchmarks and encouraging more teacher-student engagement. (Saitakham & Suppasetseree, 2011; Yanga & Yenb, 2016).



Figure 5

Digital technology tools employed in the studies.



RQ3: What challenges and opportunities have researchers identified in using digital technology for English vocabulary learning? The findings were as follows.

On the other hand, several challenges and limitations had been addressed in implementing technology-enhanced language learning. While technology-enhanced language learning presents opportunities for improved educational outcomes, it faces significant challenges. Issues such as limited participant diversity, the necessity for teacher digital literacy, varying student readiness, and potential inconsistencies in assessment underscore the need for targeted training and careful



implementation of digital tools like WeChat. Addressing these limitations is crucial for maximizing the effectiveness of ICT in language education.

On the one hand, the integration of technology in English language teaching offers substantial benefits, enhancing vocabulary development and language acquisition through various digital tools like Quizlet, WeChat, and TED-ED. The combination of mobile applications with traditional learning creates a cost-effective blended learning environment, fostering engagement and diverse learning opportunities. Moreover, these resources encourage learner autonomy, allowing students to take control of their educational journey, thereby proving the potential of digital tools to enrich the overall learning experience

According to some research, mobile-assisted language usage (MALU) went beyond conventional teaching techniques and was a major breakthrough in electronic device integration (Jarvis & Krashen, 2014). Enhancements in student performance and engagement across several platforms further demonstrated the efficacy of technology integration. According to studies, extended reading exercises based on online multimedia greatly improved reading comprehension and vocabulary size (Chavangklang et al., 2019). E-Glossary applications have demonstrated efficacy in enhancing text comprehension (Rohan & Suyono, 2021), whereas Mobile Augmented Visual Reality (MAVR) materials have demonstrated encouraging outcomes as interactive aids (Jalaluddin et al., 2021). Technology-enhanced learning environments have routinely shown to perform better than traditional techniques in experimental research, with follow-up assessments showing lasting benefits (Kilickaya & Krajka, 2010).

For language learners, the study identified a number of significant advantages and opportunities for language learners. When using digital tools, students showed greater autonomy and drive, and many of them were highly prepared for mobile learning (Valeeva et al., 2019). Students were able to focus on their own needs, create customized schedules, and set their own pace because to the flexibility of digital platforms (Nisbet & Austin, 2013). Research has also demonstrated that technology-assisted learning improves student engagement, retention rates, and problem-solving skills (Limpinant, 2017; Savchuk et al., 2019). Additionally, students' opinions of Facebook groups and augmented reality apps were favorable, suggesting that these tools have a lot of potential for language learning (Purnamasari et al., 2018).



For language teachers, both challenges and opportunities were highlighted in the investigation. Although digital tools provided a wealth of teaching opportunities, they also suggested that more strategies were needed to improve teachers' online teaching skills (Boonmoh et al., 2022). Teachers need to be well trained in integrating technology and become aware of different vocabulary learning methodologies (Khalifa et al., 2016). Teachers must modify their teaching strategies in light of the research's recommendation that teacher-centered techniques give way to student-centered ones (Savchuk et al., 2019).

Based on areas of the studies, this research showed that different countries had varied patterns of technology uptake and efficacy. Studies have demonstrated notable success with augmented reality applications and game-based learning platforms in Southeast Asian nations such as Thailand and Malaysia (Traiphong, 2019; Jalaluddin et al., 2021). Internet applications have been shown to improve EFL learning in Middle Eastern nations like the United Arab Emirates (Mohamed, 2021). Studies conducted in Europe, especially in Slovakia and Turkey, have shown that technology may be successfully incorporated into specialized language learning environments (Gluchmanova, 2021; Ercan, 2020). Taiwan and other East Asian nations have demonstrated effectiveness in creating extensive learning environments using digital platforms (Yanga et al., 2016).

In conclusion, rigorous evaluation of student needs, teacher preparation, and institutional support mechanisms were critical to the success of technology integration. Ongoing research and development would be essential to improving these tools for language teaching and learning as technology continued to advance. Developing well-rounded, technologically advanced learning environments that accommodated a range of learning preferences while preserving pedagogical efficacy and encouraging student autonomy was crucial for the future of language instruction.

4. Discussion

4.1 Teaching English vocabulary in higher education

Over the past decade, English vocabulary teaching in higher education has evolved significantly. Based on the analyzed research, several key recommendations emerge for advancing English vocabulary teaching in higher education. Future studies should prioritize longitudinal assessments that track vocabulary retention beyond the classroom environment, particularly



focusing on how digital tools impact long-term word retention and usage. Researchers should develop comprehensive frameworks for integrating social media and authentic online content into vocabulary instruction, ensuring these align with pedagogical objectives while leveraging students' daily digital interactions. Educational institutions should establish structured collaboration networks between educators and researchers to facilitate knowledge sharing and the development of evidence-based teaching practices. Additionally, there should be a focus on creating standardized assessment tools that can effectively measure both immediate and long-term vocabulary acquisition across different learning contexts. Professional development programs should be implemented to help instructors effectively integrate digital tools and innovative teaching methods into their practice. Furthermore, institutions should invest in developing platforms that support the seamless integration of traditional and digital learning approaches, while also implementing robust systems for evaluating the effectiveness of these integrated methods. This multi-faceted approach, combining technological innovation with pedagogical expertise, will help create more effective and sustainable frameworks for vocabulary instruction in higher education settings.

Lastly, to enhance English vocabulary teaching in higher education, it is essential to undertake longitudinal studies on vocabulary retention, leverage digital tools, and integrate social media into instruction. Establishing collaborative networks between educators and researchers will facilitate evidence-based practices, while standardized assessment tools are crucial for measuring vocabulary acquisition. Additionally, professional development for instructors and investment in platforms that merge traditional and digital learning will support effective teaching.

4.2 Digital technology in language learning

Mobile-assisted language learning (MALL) like apps, online platforms, and virtual classrooms has emerged as a foundation of modern language instruction. According to the literature examining MALL and digital language learning technologies, researchers should prioritize conducting comprehensive studies that evaluate the effectiveness of digital tools across different age groups and learning styles, with particular attention to how AI-powered language learning systems impact long-term language acquisition and retention. Educational institutions should develop integrated frameworks that effectively blend traditional teaching methods with digital tools, ensuring these approaches complement rather than replace established pedagogical



practices. There should be increased focus on creating standardized assessment protocols for evaluating AI-powered language learning tools, particularly examining their impact on speaking and listening skills development. Additionally, institutions need to address the digital divide by implementing strategies to ensure equitable access to digital learning resources, including VR and AR applications, across all student populations. Research efforts should also examine how to optimize the integration of social media and video platforms into formal language instruction while maintaining pedagogical effectiveness. Furthermore, educational policymakers should prioritize creating comprehensive guidelines for implementing and evaluating digital language learning tools, ensuring they align with established educational standards while promoting innovative teaching approaches.

To sum up, the literature on MALL and digital language learning technologies underscores the need for comprehensive research on the efficacy of AI-driven language tools across diverse demographics. Additionally, focusing on best practices for immersive technologies and developing guidelines for balanced learning approaches will be crucial for educational policymakers to ensure effective implementation aligned with educational standards.

5. Pedagogical implications and suggestions for future research

To optimize the benefits of digital technology in language learning, educators, policymakers, and researchers must work collaboratively to develop practical implementation strategies. Educational institutions should prioritize comprehensive technology integration plans that address key challenges such as teacher training, technical infrastructure, and curriculum design. Providing professional development opportunities for educators ensures that they can effectively incorporate digital tools into their teaching practices. Furthermore, policymakers should consider policies that promote digital literacy, ensuring that both educators and students can navigate and utilize digital learning platforms effectively. Institutions must also address issues of accessibility, particularly in under-resourced settings, to prevent digital learning disparities. Researchers, on the other hand, should explore interdisciplinary approaches by integrating insights from cognitive science, linguistics, and educational technology to design more effective vocabulary learning interventions.



In conclusion, the future of English language teaching lies in striking a balance between technological innovation and pedagogical effectiveness. Research collectively suggests that institutions should focus on sustainable digital strategies that foster learner autonomy while maintaining engagement. As Sartor (2020) emphasized, understanding the purpose and pedagogical potential of digital tools is crucial for their successful implementation. Moving forward, continuous research and development in this field will be essential to maximize the benefits of technology-enhanced language learning while decreasing its challenges. Ultimately, the goal is to create an inclusive and effective learning environment that prepares students for the increasingly digital future of education and global communication.

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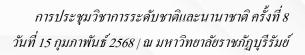


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Appendix Table 2 R

No.	Authers and years	Research	Sample	Participant types	Integrated digital technology	Outcomes	Opportunities and challenges	Context country
-	Boonmoh et al.	Mixed methods	20	Teachers		· Need additional approaches to enhance teachers online teaching abilities		Thailand
2	Thongchu & Adipat (2022)	Quantitative	39	Students	Augmented Reality (AR) technology	The results showed that after school was significantly higher than before at the 05 level		Thailand
ю	Durongbhandhu & Suwanasilp (2021)	Quantitative	72	Students	materiai Multimodal Glossing Reading Program (MMGR)	-Teaching English vocabulary through MMCR program not only helps learners have the ability in vocabulary acquisition, but also enables the instructors to use the program as a potentially supplemental material or alternative method in reaching vocabulary as well.		Thalland
4	Aprilani (2021)	Qualitative	so.	Students	Quizlet	reference of the state of the s	 -Accordingly, this research recommends English teachers use Quizlet in teaching English vocabulary to students in the classroom 	Indonesia
ю	Li et al. (2021)	Quantitative	133	Students	WeChat assisted lexical learning (WALL)	The independent variables had no correlation with the students' textical properties only their importanty, the students had a decline in the test scores after using the program, compared to their initial test scores. Moreover, the difference was reported to be medium. The fluiding further proposed questions on applying WeChat to vocabulary reaching in a large scaled transition.	The study is expected to provide insights for tertiary institutions, language practitioners, and student stakeholders to troubleshoot the potential problems regarding implementing WcCharl based TEFL pedagogies	China
9	Korkmaz & Öz (2021)	Quantitative	38	Students	Kahooti	The Kahoot game made significant gains, particularly in vocabulary. Overall, findings suggest that Kahoot can be an effective way to motivate EFL learners. Thereby enhancing their ability to connoclened various reading materials.		Turkey
٠	Mohamed (2021)	Quantitative	08	Students	Mobile applications	 The results revealed that internet applications have a positive impact on its origin sea of region language. Students attitudes towards using internet applications for learning English socored very ligh in certain areas, while the impact was lower in some other areas that its related to speaking, listening or to group discussions. 	Based on these results, the researcher suggests that internet applications can be exterived at all stages of English Inaquenge herming and teaching. The implementation of mobile and internet applications is recommended together with the face to face learning as a sort of biended learning. It can be budget friendly the cut wivestiles and at he same lime effortless for the suitories as long as it gives the same impact as face to face learning. Therefore, the significance of the study is to up to unifier the best ordine technological method for excerting and learning English Language that is useful to instructors, incititations as well as students.	UAE
00	Glichmanova (2021)	Mixed methods	200	Students	Moodle	The research findings prove that the experimental group of students from different study programmes a therefore the best surfavire-results in those manufacturing technologies e-tests which are closely connected with their study programme. The results confirm that English teaching focused on talior-made pofessional texts and optics within the engineering levels of studies was effective. Teachers also identified the strengths and weaknesses of students within tasks to practice language competencies. By applying exist students were able to improve their language skills, which can be president in selected frontigo computate on in their future careers as engineers, technicians, managers or computer programmers.		Slovakia
on .	Jalaluddin et al. (2021)	Quantitative	45	Students	-Mobile Augmented Visual Reality (MAVR) - an AVR game based apps	Analysis showed that there was an increase in the scores and the differences between the levels of the within subjects factor was significant. This implies that Mobile Augmented Visual Reality (MAVR) materials can be used as an interactive tool for LA learners in learning a language. Farbiting shighlight the role of the excess and to print our sostile directions for more effective analysis on this field our rossible directions for more effective analysis on this field.		Malaysia
01	Rohan & Suyono (2021)	Mixed methods & DDR	92	Teacher and students	An Android-based application called POLINEMA Bilingual E. Glossary	The output of the study is an android application of billingual E-Clossary of English for Specific Purposes. There were sever liefs for glossary, each of which consists of vocabulary in English, the translation or description in Indonesian language, along with example sentences in two languages. Pictures are also displayed for easy understanding of the vocabulary. Field exempt growers that the E-Grossary application is quite effective in helping users in comprehending English texts better.		Indonesia



An Exploring Factors Influencing Customer Loyalty towards Franchised Stores in Phnom Penh, Cambodia

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Abstract

This study aimed to find out the factors influencing the customers' loyalty towards the Convenient Franchised Stores in Phnom Penh City, Cambodia. Also, the relationship between customer satisfaction, customer loyalty, service quality, and perceived price value are examined in this study. A total of 150 customers of three Convenient Franchised Stores in Phnom Penh were selected and participated in this study via non-probability, convenience sampling, and the snowball technique. The research instrument was a set of questionnaires. The collected data were analyzed by using descriptive and inferential statistics through computer software. The results revealed that the factors influencing customer loyalty both as a whole and each dimension were at high levels. Also, it was indicated that the customer loyalty of customer was found to be influenced by the Perceived Price Value, the Customer Satisfaction, and the Service Quality, respectively. This study can be implied to strategic market planning to create a good experience for customers.

Keyword: Customer, Loyalty, Satisfaction, Convenient Franchised Stores

Introduction

The world is facing a crisis economic situation, especially in Europe, the United States and China, which are the main engines for measuring global economic growth. The socio-economic situation in ASEAN and the world as whole remains uncertain and fragile due to the



Russia-Ukraine war. The political war between Russia and Ukraine continued, as well as geopolitical rivalries that in the past caused problems and risks to regional and global stability and prosperity (World Economic Forum-WEF, 2024; Royal Government of Cambodia, 2023; Ministry of Commerce, 2023). By 2020, free trade agreements will be established with 15 countries in the Asia-Pacific region to establish a Greater Free Trade Area. By 2022, Cambodia has set four strategic goals under the pillars of the ASEAN Economic Community to promote economic and social development. Government agreements will reduce companies 'costs and time in exporting their products to member countries (Ministry of Commerce, 2022; Ministry of Commerce, 2023).

Acceptance of new and professional initiatives Cambodia has become more active in the ASEAN Economic Community, which has created new opportunities for increased sales and services. The local population is also growing in consumption. The government is also providing support and collaboration with the private sector to take advantage of new technologies and initiatives to boost retail sales and strengthen operational capacity. Transformed store profiles and service delivery can be matched to fast, high-performance technology. This job requires retailers to react promptly to welcome new forms and attract new consumers (Ministry of Commerce, 2023; Law on Amendment to the Law on Trade Rules and Business Registration, 2022). Franchise business model is an important function to adopt. It can provide quick control in establishment of several retail stores. Customers have many options caused by passion with experience and business venture into the market, the acquisition of a franchise or a franchise business, continues to be called franchise. High quality products and fast service that comply with national and international standards are the key factors in attracting. In a highly competitive market, the ability to innovate and differentiate to attract customers becomes and important factor in developing and accelerating business (Kotler, 1996). Awareness of this business local entrepreneurs in Cambodia are still limited, but this type of business is growing rapidly and is very popular. Most Cambodians consume well-known branded products imported from the United States, the United Kingdom, France, Australia, South Korea, Singapore, Thailand, Japan, Hong Kong, Taiwan and Canada. Supermarkets that have stepped in include Super Duper, Smile Mini Marts, Lucky Express, Aeon MaxValu, Express, Kiwi Mart, Circle K, and 7-Eleven (Ministry of Commerce, 2023).

Knowing the aspects that affect customers' loyalty, such as perceived price value, customer satisfaction, and service quality, may reveal insights into the thoughts and feelings of



customers. Understanding the connection between past consumer behavior and future behavior is very important. No studies have been conducted in this area in Cambodia.

Objectives

The fundamental objectives of this study are twofold: 1) to find out the factor influencing the customers' loyalty towards the Convenient Franchised Stores in Phnom Penh City, Cambodia; and 2) to discover the relationship between perceived price value, service quality, customer satisfaction and customer loyalty towards the Convenient Franchised Stores in Phnom Penh City, Cambodia.

Definition of Key Terms

The following key terms are defined to give precision to the scope of their meanings in this study.

Perceived price value (PPV): When consumers weigh the benefits, they obtain from their purchases against the costs — such as time, money, and energy — they are determining perceived value. High customer satisfaction and a favorable impact on loyalty will result if clients realize they received high-quality services or that the value of the services outweighs the costs. Customer satisfaction may also benefit from the perceived worth of the product. Customer satisfaction is high when the perceived value of the product is high.

Service quality (SEQ): Service quality is the outcome of the evaluation process that compares perceived and expected services. Since consumers will assess an organization's service quality based on its superiority, a type of attitude also explained service quality. Focusing on providing customers with high-quality services also gives a firm a competitive edge. Customers' perceived value may be influenced by the quality of the services they receive when they are of a higher caliber than what they had anticipated. Additionally, the company should provide higher-quality services to increase the perceived value in the eyes of its clients.

Customer satisfaction (CUS): The outcome of comparing consumers' expectations of service performance with their opinions of service quality is customer satisfaction. Customers should be satisfied with the company's goods or services in order to have a positive opinion of the brand.



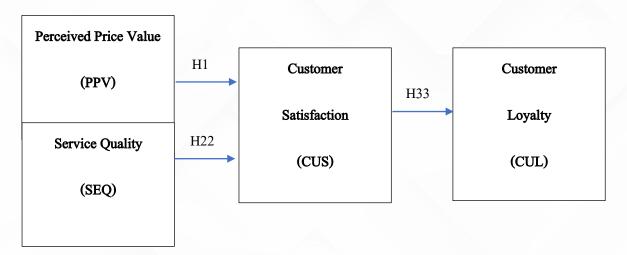
Customer loyalty (CUL): Customer loyalty can be shown through actions like making repeat purchases of goods and services. Research on customer loyalty is broader since attitudinal loyalty is a psychological aspect of client loyalty. Customer loyalty can also be defined by factors including resistance to switching to competitors' services, willingness to suggest the service to others, and intention to repurchase. Moreover, the repurchase intention of the client and the ability to persuade others to utilize a service while maintaining loyalty to the company were used in this study to gauge customer loyalty.

Conceptual Framework

The theoretical framework of Saleen and Raja (2014) was conceptualized as the conceptual framework for this study. As a result, this conceptual framework has been modified to comprehend the impact of perceived value, service quality, and customer satisfaction on the loyalty towards the Convenient Franchised Stores in Phnom Penh City, Cambodia.

Figure 1

The Conceptual Framework Used in the Study



Based on the conceptual framework, the hypotheses were tested as follows:

- H1: Perceived price value (PPV) has a significant influence on customer satisfaction (CUS).
- H2: Service quality (SEQ) has a significant influence on customer satisfaction (CUS).
- H3: Customer satisfaction (CUS) has a significant influence on customer loyalty (CUL).



Research Methodology

In order to determine the hypothesis on the factors that influence customer loyalty — namely, perceived price value, service quality, and customer satisfaction — this study employed a quantitative technique.

The research participants were 150 who are Cambodian people living in Phnom Penh City and receiving the services from three franchised stores, namely; Super Dupper, 7-Eleven, and Smile Mini Mart. Non-probability sampling, convenience sampling, and the snowball technique were used to gather data from the target group, which consists of Cambodian people who reside in Phnom Penh City, Cambodia. The questionnaires used in this study were divided into three sections: screening questions, demographic questions, and variable measurement questions. A five-point Likert scale is used to measure the variable. Five indicates "strongly agree," 4 indicates "agree," 3 indicates "neutral," 2 indicates "disagree," and 1 indicates "strongly disagree." The screening phase of this study involves looking for Cambodian residents who have services with the Convenient Franchised Stores in Phnom Penh City. To test hypotheses H1 and H2, Multiple Linear Regression (MLR) was used. Then, Hypothesis H3 was examined using simple linear regression (SLR).

Remarkably, the reliability test that was evaluated using 30 sets of the pilot test and Cronbach's Alpha Coefficient is determined. The CUL has 4 items with its Cronbach's Alpha was 0.78, the SEQ consisted of 7 items with its Cronbach's Alpha was 0.77, while the PPV has 4 items with its Cronbach's Alpha was 0.89 and the CUS contained 4 items with its Cronbach's Alpha was 0.84. This test determines whether or not each variable has a level of dependability that is higher than 0.6. The Cronbach's Alpha Coefficient ranges were 0.77 to 0.89. Additionally, the minimum value exceeded 0.7, indicating that all of the questionnaire's variables are acceptable.

Based on the three levels of interpretation of service providing proposed by Oxford and Burry-Stock (1995), these means can be divided into three groups: high service providing (mean of 3.50 or above), medium service providing (mean of 2.50 to 3.49), and low service providing (mean below 2.50).



Results

The results of each research objective are described in the following order: 1) descriptive analysis by each dimension; and 2) inferential analysis by each variable and hypothesis.

Table 1

Mean (M), Standard Deviation (SD), Meaning and Rank by each Dimension (n=150)

No.	Dimension	M	S.D.	Meaning	Rank
1.	Perceived Price Value (PPV)	4.13	0.68	High	4
2.	Service Quality (SEQ)	4.21	0.58	High	1
3.	Customer Loyalty (CUL)	4.16	0.72	High	3
4.	Customer Satisfaction (CUS)	4.18	0.63	High	2
	Total	4.17	0.65	High	

As revealed in the table 1 above, the Cambodian people reported that they were loyalty towards the Convenient Franchised Stores in Phnom Penh City both as a whole and by each dimension were at the high level. Ranking from the highest to the lowest mean scores, it was found that the Service Quality reported the most (M=4.21, S.D.=0.58), the Customer Satisfaction the second most (M=4.18, S.D.=0.63), followed by the Customer Loyalty (M=4.16, S.D.=0.72), and the Perceived Price Value (M=4.13, S.D.=0.68), respectively.

Table 2

Correlation between each Dimension

Pearson's	3.6	a P	DD11	GT IG	CT T
Correlation	M	S.D.	PPV	CUS	CUL
1- PPV	4.13	0.68		0.87*	
2- SEQ	4.21	0.58	0.83*	0.86*	
3- CUL	4.16	0.72			0.81*
4- CUS	4.18	0.63			



Table 2 above shows the Pearson's Correlation Matrix. It was revealed that all of the dimensions have positive connections with one another. The CUS was associated with the CUL, while the PPV and the SEQ were associated with the CUS. Mukaka (2012) identifies the following correlation sizes: 0.0 to 0.3 indicates a negligible correlation, 0.3 to 0.5 indicates a low positive correlation, 0.5 to 0.7 indicates a moderate positive correlation, 0.7 to 0.9 indicates a high positive correlation, and greater than 0.9 indicates a very high positive correlation. All the factors in this study have a high correlation.

Table 3

Results of the CUL (H3) analyzing by Simple Linear Regression (n=150)

Hypothesis	Variable	Standard Coefficient	Sig.	VIF	Result
Н3	CUL	0.81	0.00	1.00	Rejected
R Sq	uare		0.65	4	
Adjusted 1	R Square		0.65		

The R square in Table 3 is 0.656, which indicates that the independent variable, Customer Satisfaction (CUS), can predict the dependent variable, Customer Loyalty (CUL), by 65.6% or that the CUS influences the CUL by 65%. The Customer Satisfaction (CUS) and the Customer Loyalty (CUL) are related, as indicated by the sig or P-value of 0.00, which is less than 0.05. As a result, H3 is rejected. Additionally, the standard coefficient of 0.81 indicates that the Customer Loyalty (CUL) is significantly impacted by the Customer Satisfaction (CUS) by 81%. Furthermore, the multicollinearity issue won't arise because the VIF is 1, which is less than 5.

Table 4

Results of the PPV (H1) and SEQ (H2) analyzing by Multiple Linear Regression (n=150)

Hypothesis	Variable	Standard Coefficient	Sig.	VIF	Result
H1	PPV	0.52	0.00	3.23	Rejected
H2	SEQ	0.42	0.00	3.23	Rejected
R Sq	uare		0.82		
Adjusted	R Square		0.82		



As revealed in the table above, the Perceived Price Value (PPV) and the Service Quality (SEQ) are framed as the independent variables that can predict the dependent variable, the Customer Satisfaction (CUS), by 82%, or that have a 65% impact on customer satisfaction, according to Table 6's R square of 0.827. The Perceived Price Value (PPV) and the Service Quality (SEQ) have statistically significant difference (P-value of 0.00), which is less than 0.05. This indicates that they are related, and hence, H1 and H2 are rejected. The Perceived Price Value (PPV) has the most significant impact on the Customer Satisfaction (CUS) by 52%, while the Service Quality (SEQ) has the most significant impact by 42%. The standard coefficient of the PPV and the SEQ is 0.52 and 0.42, respectively. The multicollinearity problem will not arise because the Perceived Price Value (PPV) and the Service Quality (SEQ) VIFs are both 3.23, which is less than 5.

Discussion and Conclusion

Customer loyalty is significantly impacted by perceived price value, service quality, and customer satisfaction, according to the study. Because it is based on the opinions of customers towards the Convenient Franchised Stores in Phnom Penh City, Cambodia, the most significant finding of this study is the elements that influence customer loyalty. The study demonstrates that consumer satisfaction can be influenced by perceived pricing value, which has the most impact, and service quality. Additionally, customer loyalty might result from consumer satisfaction.

This study was organized into two sections. First, how perceived value in terms of price and service quality affects consumer happiness. The second is the relationship between customer loyalty and customer satisfaction. Numerous techniques were employed in this study, including multiple linear regression (MLR), simple linear regression (SLR), and Pearson's correlation matrix.

A total of 150 participants make up the entire sample size of this study, which represents the population samples. Positive correlations between all the variables were shown in the Pearson's correlation matrix, indicating that they are related to one another. They also influence each other.

One of the independent variables that makes up client loyalty is customer satisfaction. The two independent factors that make up customer happiness are perceived value of price and



quality of service. According to the results, customer contentment, perceived value of the product, and service quality all contribute to customer loyalty.

Suggestions

To comprehend and interpret the customer that influence customer loyalty, it may be helpful to consider the influence of perceived price value, service quality, and customer. The findings demonstrated how perceived price value, service quality, and customer happiness relate to consumer loyalty. Customer satisfaction has a substantial impact on customer loyalty, as evidenced by the fact that satisfied customers are more inclined to support or repurchase franchised services in the future.

When customers are satisfied with the services they receive, their requirements and desires are met. When customers are pleased with their service experience and are pleased that they chose to purchase with the franchised store, they are more inclined to recommend the franchise to others. As a result, happy customers are more likely to stick with the same franchise rather than switching to another.

Customer satisfaction can be directly impacted by service quality. Acknowledging that they received high-quality service also makes customers feel very satisfied. Customer satisfaction is also influenced by resources. Perceived pricing value and service quality are positively and directly correlated, which helps to maintain a constant level of service quality. They also demand a high-quality return on their investment, regardless of the amount they pay. They will switch to another franchise if not.

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Psychological Well-being, Attachment Style, and Work Performance among Staff of the Ministry of Cult and Religion, Cambodia

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Abstract

Organizations can play a key role in supporting employees with attachment trauma by fostering a culture that supports employee well-being. With an emphasis on the mediating function of psychological well-being at work, this study explored the association between attachment style and individual work performance. The Experience in Close Relationships Scale (ECR), the Index of Psychological Well-being at Work (IPWBW), and the Individual Work Performance Questionnaire (IWPQ) were completed by 111 staff of the Ministry of Cult and Religion, who served as the study's survey participants. The findings imply that for both anxious and avoidant attachment styles, the association between attachment type and individual work performance is mediated by psychological well-being at work. Lower psychological well-being at work was predicted by increases in attachment avoidance, which also showed up as poorer work performance. On the other hand, higher levels of psychological well-being at work were predicted by increases in attachment anxiety, and this in turn linked to improved work performance. According to the post-hoc results, the attachment type and individual work performance link is mediated most effectively by emotions of competence and a desire for involvement at work. The significance of using mediators to gain a deeper understanding of the connection between an individual's work performance and their attachment style is underscored by these findings.

Keyword: Attachment Style, Psychological Well-being, Work Performance



Introduction

Arguably, an organization's most valuable asset is its people. The Ministry's total performance is influenced by their distinct expertise, abilities, and experience. One of talent management's primary responsibilities is to comprehend employees and how to effectively assist them in their positions (Silzer & Dowell, 2010; Mok, 2014; Royal Government of Cambodia - RGC, 2023). Early experiences can have an impact on how an adult function later in life, according to research. Freud (1895) was among the first to examine how interactions in early life produce patterns that recur in relationships as an adult (Gomez, 2005; Mok, 2014; RGC, 2023). The term "transferring of thoughts, feelings, and fantasies about some childhood figure onto the therapist" (Westen, 1988, p. 163) was first used by Freud in 1895.

To investigate the connection between personality traits and organizational results, numerous studies have used the Big Five personality inventory (Littman-Ovadia et al., 2013; Anglim et al., 2019). But there hasn't been as much study on the connection between organizational outcomes and attachment type (Yip et al., 2017). There is a correlation between attachment style and job performance, according to some research, with insecure attachment having a detrimental impact on job performance (Kale, 2020; Virga et al., 2019; Ronen & Zuroff, 2017; Neustadt et al., 2011). Less is known, though, about the factors that moderate the connections between job performance and attachment type (Mok, 2014; Ronen & Zuroff, 2017; Virga, et al., 2019).

The literature on attachment type and psychological well-being at work is similarly lacking. Little is known about how attachment type may affect the relatively new, domain-specific notion of psychological well-being at work, despite research finding a link between attachment style and overall psychological well-being. According to studies on wellbeing, people with high levels of attachment anxiety are more emotionally distressed and have a stronger need for reassurance than people with secure attachment styles (Littman-Ovadia et al., 2013, Joeng et al., 2017; Lim, 2023). Insight into how to help staff emotionally at work and improve their performance can be gained by comprehending the connection between attachment type, psychological well-being at work, and work performance. Understanding ways to lessen staff distress associated with attachment requirements may be made easier for organizations by this



research. Staff who believe their leaders are attentive to their attachment requirements may perform better at work.

Objective

The objective of this quantitative study utilizing non-experimental design is to explore the relationships between attachment style and work performance, by exploring psychological well-being at work as a potential mediator among staff of the Ministry of Cult and Religion, Cambodia.

Research Questions

Based on the objective of this study, the following research questions were formulated.

- 1. What is the relationship between attachment style and psychological well-being at work among staff of the Ministry of Cult and Religion, Cambodia?
- 2. What is the relationship between psychological well-being at work and work performance among staff of the Ministry of Cult and Religion, Cambodia?

Research Hypotheses

Given the objective of the study and research questions the specific hypotheses may be stated as follows:

- H₀1: There is no relationship between attachment style and psychological well-being at work among staff of the Ministry of Cult and Religion, Cambodia.
- H₁1: There is a significant negative relationship between attachment style and psychological well-being at work among staff of the Ministry of Cult and Religion, Cambodia.
- H₀2: There is no relationship between psychological well-being at work and work performance among staff of the Ministry of Cult and Religion, Cambodia.
- $\rm H_12$: There is a significant positive relationship between psychological well-being at work and work performance among staff of the Ministry of Cult and Religion, Cambodia.

Research Methodology



This quantitative study examines the connections between work performance, psychological well-being at work, and attachment style using a non-experimental design. To determine if attachment style and psychological health at work have an impact on work performance, SPSS statistical software is used. The possible mediation effect of psychological well-being at work on the relationship between attachment and work performance is tested by a route analysis using Mplus software.

Targeted Samples

The targeted samples of this study were 111 staff who are working as government officials of the Ministry of Cult and Religion, Cambodia. To be included in the research study, they are classified as the technical staff ranking from the Director General to the office staff. They were voluntarily participated in this study procedures.

Research Instruments

1. Attachment Style

The Experience in Close Relationships Scale (ECR), a psychometric tool created to assess unstable adult attachment patterns, is used to measure attachment avoidance and attachment anxiety (Brennan et al., 1998). Attachment avoidance and attachment anxiety scores are derived from the 36 items in the self-report survey. Higher degrees of nervous attachment are indicated by a high attachment anxiety score. Likewise, a high degree of avoidant attachment is indicated by a high attachment avoidance score. "People who score high on either or both of these dimensions are assumed to have an insecure adult attachment orientation" (Wei et al., 2007, p. 188). According to Wei et al. (2007), the scale's initial version shows sufficient internal consistency with anxiety ($\alpha = 0.92$) and avoidance ($\alpha = 0.93$).

2. Psychological Well-Being at Work

The Index of Psychological Well-Being at Work (IPWBW) is used to measure psychological well-being at work. Five dimensions make up this 25-item self-report tool: Feelings of Competency at Work ("I know I am capable of doing my job"), Perceived Recognition at Work ("I feel that my work is recognized"), Desire for Involvement at Work ("I want to take initiative in my work"), Interpersonal Fit at Work ("I value the people I work with"), and Thriving at Work ("I find my job exciting"). Using a Likert rating scale (0 being disagree and 5 being entirely agree), the questionnaire takes into account work experience during the previous four weeks. The



averages of the five measures can be combined to provide an overall score for psychological well-being at work. Tests of the questionnaire's psychometric qualities revealed satisfactory reliability for both the entire scale ($\alpha = 0.946$) and each of the five individual scales: Perceived Recognition at Work ($\alpha = 0.833$), Feeling of Competency at Work ($\alpha = 0.861$), Desire for Involvement at Work ($\alpha = 0.888$), Thriving at Work ($\alpha = 0.907$), and Interpersonal Fit at Work ($\alpha = 0.92$).

3. Work Performance

According to Koppmans et al. (2014), participants' work performance is assessed using the Individual Work Performance Questionnaire (IWPQ) task and contextual performance measures. Three aspects of job performance make up this 18-item self-report survey: task performance ("I was able to plan my work so that I finished on time"), contextual performance ("I started new tasks on my own initiative when my old tasks were completed"), and counterproductive work behavior (CWB; "I complained about unimportant issues at work"). Each item measured responses over the previous three months using a Likert rating system (0=rare to 4=always for task and contextual performance; and 0=never to 4=frequent for CWB).

Task Performance (items 1, 2, 3, 4, and 5) and Contextual Performance (items 6, 7, 8, 9, 10, 11, 12, and 13) scores were combined together and divided by their sum (n=13) to determine a mean score for work performance. According to Sadovyy et al. (2021), positive characteristics of work performance are measured by combining task and contextual performance scales. Because counterproductive work behavior has not been linked to attachment in prior research, it was excluded from the job performance measure in this study (Richards & Schat, 2011; Jahanzeb et al., 2022). Tests of the questionnaire's psychometric qualities revealed that it was satisfactorily reliable for task performance ($\alpha = 0.78$), contextual performance ($\alpha = 0.85$), and counterproductive work behavior ($\alpha = 0.79$).

Data Analysis and Statistical Applications

The data was processed using Mplus and SPSS software. Descriptive statistics, inferential statistics, reliability testing, and evaluating the assumptions of a linear regression model were all done via SPSS. Hypotheses were tested and a path analysis was performed using Mplus software. The association between attachment type and psychological well-being at work was investigated using main effect testing (Research Question 1). Likewise, to determine if psychological well-being at work accounts for variance in job performance, the end variable, work performance, was



regressed using a multiple regression model (Research Question 2). In order to determine whether psychological well-being at work influences the association between attachment type and work performance, interaction effects were also examined. The significance test was used to analyze the results at p < .05.

Results

The results of this study were divided into four parts: (1) The Results of Evaluating Gender, Age and Position (Dependent Variables); (2) The Results of Regression Assumption Testing; (3) The Results of Mplus Model Fit Indexes; (4) The Results of Direct Effects of the Original Conceptual Model; (5) The Results of Attachment and Work Performance; (6) The Results of Hypothesis 1; (7) The Results of Hypothesis 2; (8) The Results of Hypothesis 3; and (9) The Results of Post Hoc Analysis. Details are presented as follows:

1. The Results of Evaluating Gender, Age and Position (Dependent Variables)

The impact of the suggested control variables — gender, age, and position — on the outcome variable — work performance — was examined using a number of tests. Control variables would be incorporated into the path analysis if it were discovered that they were affecting work performance. Initially, a t-test was employed to determine whether gender was influencing performance at work. Gender significantly affects work performance, according to the t-test, which showed that the mean score for females was considerably higher than the mean score for males (t(129)= -2.518 [-.61114, -.06240] p =.013). The final model mediation analysis incorporated gender because of its substantial impact on work performance.

ANOVAs were performed to see if age and position had a significant impact on work performance. Work performance was not significantly impacted by either employment position (F(4, 126) = .191, p = .943) or age (F(4, 126) = 1.148, p = .337). As a result, the mediation study will not include position or age as control variables.

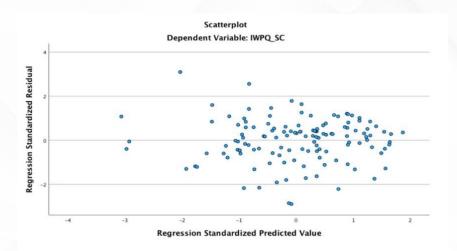
2. The Results of Regression Assumption Testing

To ascertain whether the linearity, equal variances, normally distributed standardized residuals, lack of multicollinearity, independence of mistakes, and absence of influential instances assumptions of a linear model were met, analyses were performed. According to Field (2015), one



of the main tenets of linear regression is that the connection between the result variable and predictor variables is best described by a linear model as shown in Figures 1 and 2 below.

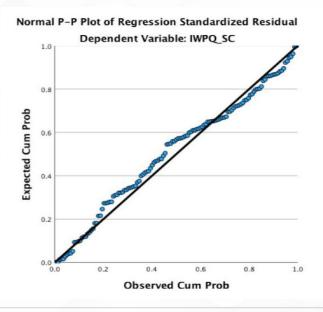
Figure 1
Scatterplot's Normally Distributed Data



The data scatterplot, as shown in Figure 1, showed no discernible funneling or curving to the data points, indicating that a linear model should be used. The scatterplot's normally distributed data confirms that the linearity and homoscedasticity assumptions have been satisfied.

Figure 2

Normal P-P Plot of Regression Standardized Residual





Furthermore, a PP-plot, as illustrated in Figure 4, showed normalized residual values that were somewhat normally distributed and hovered above the projected line. This suggests that standardized residuals with a normal distribution have been satisfied. The variance inflation factor (VIF) must be less than 10 and the tolerance scores must be higher than.01 in order to test the assumption of no multicollinearity. The premise that no multicollinearity has been satisfied is confirmed by the data's tolerance of .2 and VF of .5.

The Durbin-Watson test must be at least one and roughly two in order to satisfy the independence of errors assumption. The assumption of error independence has been satisfied, according to the Durbin-Watson test result of 1.478. To ascertain whether the sample contained any influential examples, Cook's distance was taken into account. No significant cases were found, and no data was eliminated from the sample because there were no cases larger than or equal to 1.

In conclusion, the results of the testing showed that every linear model assumption was satisfied. It was found that the sample was normally distributed, free of multicollinearity, independent of errors, and devoid of significant cases. To boost confidence that a linear regression model may generalize to a larger population, it is crucial to meet its assumptions (Field, 2015). Before doing analysis, no instances were eliminated and the data was not changed because there was no missing participant data and all linear assumptions were satisfied.

3. The Results of Mplus Model Fit Indexes

A very good model fit to the data was shown by model fit indexes. According to an R2 of.427, 42% of the variation in work performance can be explained by the model. In other words, 42% of the observed influence on work performance may be explained by the variables that were part of the study. Furthermore, a robust model fit is indicated by a R value greater than.5. A strong match between the data and the model was indicated by the study's R of.653. Overall, the analysis showed a number of signs that the statistical model employed in this investigation fit the data quite well.

4. The Results of Direct Effects of the Original Conceptual Model

Testing the direct and indirect impacts of independent variables on work performance was made possible by entering data into the Mplus software.



Table 1

Direct Effects of the Original Conceptual Model

Variables Tested	Model Estimate	Standard Error	P-value
GENDER → WP	0.189	0.068	0.005
$AV_AT \rightarrow PWBW$	-0.596	0.073	p<0.001
$AN_AT \rightarrow PWBW$	0.274	0.083	P=0.001
$AV_AT \rightarrow WP$	-0.174	0.089	0.049
$AN_AT \rightarrow WP$	0.038	0.072	0.615
$PWBW \rightarrow WP$	0.534	0.072	p<0.001

Note: WP = Work Performance, PWBW = Psychological Well-Being at Work

 $AV_AT = Avoidance Attachment, AN_AT = Anxious Attachment$

Table 1 reports the results of the direct impacts, with bolded text indicating significant findings. Work performance (WP) was found to be significantly impacted by gender in the final model (p = .005). According to the model, women are believed to perform substantially better at work than men.

5. The Results of Attachment and Work Performance

Work performance and attachment type are significantly correlated (p<.05), according to the analysis. Avoidant attachment (AV_AT) appears to have a substantial detrimental impact on WP, according to the results (p =.048). The model suggests that work performance declines as avoidant attachment levels rise. On the other hand, the investigation failed to find a significant impact of AN_AT on job performance. A significant direct effect of anxious attachment on job performance was not supported by the model, while it did identify a significant influence of avoidant attachment on individual work performance.

6. The Results of Hypothesis 1

Hypothesis 1 — that there is a substantial negative association (p <.05) between attachment style and psychological well-being at work (PWBW) — was partially supported by the data. According to the analysis, psychological well-being at work is significantly impacted by both AN_AT and AV_AT. As predicted, there was a negative direct effect between psychological well-being at work and avoidant attachment; psychological well-being at work declined at p<.001 as



avoidant attachment rose. But instead of a strong negative effect, the research indicated a significant positive effect for AN_AT on PWBW, hence hypothesis 1 only received partial support. There was a positive direct impact for anxious attachment, meaning that PWBW increases as anxious attachment grows (p =.001). Significant effects on PWBW were shown to clearly distinguish the various attachment styles.

7. The Results of Hypothesis 2

Hypothesis 2, which states that PWBW significantly improves individual work performance, was supported by the analysis at p <.001. WP is reported to improve as support for PWBW rises. The model's strongest influence was this one.

8. The Results of Hypothesis 3

Finally, for both AN_AT and AV_AT styles, the research revealed support for Hypothesis 3, which holds that PWBW mediates the association between attachment style and WP. Table 2 displays the results of the indirect impacts, with noteworthy findings highlighted in bold:

Table 2

Indirect Effects of the Original Conceptual Model

Variables Tested	Model Estimate	Standard Error	P-value
$\mathrm{AV_AT} \to \mathrm{PWBW} \to \mathrm{WP}$	-0.318	0.058	p<0.001
$AN_AT \rightarrow PWBW \rightarrow WP$	0.145	0.048	0.003

The findings show that the AV_AT significantly impairs WP indirectly by lowering PWBW (p <.001). Workplace psychological well-being and performance both decline with an increase in AV_AT. On the other hand, through the mediator of PWBW, AN_AT had a substantial positive indirect influence on WP (p =.003). The WP and PWBW both rise with an increase in AN_AT. The association between attachment and work performance was found to be significantly mediated by PWBW for both AN_AT and AV_AT styles.

9. The Results of Post Hoc Analysis

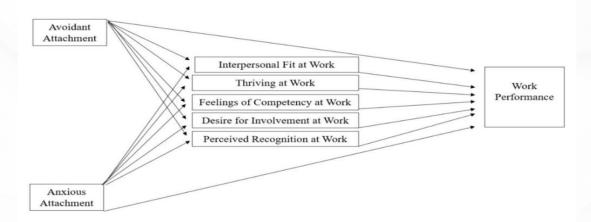
To find out if certain elements of PWBW are connected to AV_AT and AN_AT, a post hoc analysis was carried out. It was investigated how attachment type and individual work performance relate to interpersonal fit at work, thriving at work, feelings of competency at work,



perceived recognition at work, and desire for involvement at work. The five subscales of PWBW may or may not mediate the association between attachment style and work performance, according to the post-hoc study as shown in Figure 2 below.

Figure 2

Post Hoc Model



A new model was created, as shown in Figure 2, taking into account the five subscales of PWBW as mediators.

Discussion and Conclusion

For the hypothesis 1, the association between attachment style and psychological well-being at work showed significant direct impacts for both anxious and avoidant attachment. The findings support the hypothesis that psychological well-being at work declines as avoidant attachment rises. According to research, those who have an avoidant attachment style are less likely to want to socialize and feel emotionally connected to other people (Bartholomew & Horowitz, 1991). "Those with higher levels of avoidance orientation prefer to keep others at a distance, tend to distrust others, and express indifference towards people," (Reizer et al., 2020, p. 3). Many facets of interpersonal functioning are captured by the psychological well-being at work questionnaire, which could help explain why those with avoidant attachment styles performed worse on this test. Three subscales of the psychological well-being at work questionnaire measure social functioning: interpersonal fit, perceived recognition at work, and desire for involvement at work. People who have an avoidant attachment style may have a lower psychological well-being



at work score because they are less inclined to interact with others. According to earlier research, worried attachment is linked to poorer psychological health and poorer job performance (Maunder et al., 2011; Hazan & Shaver, 1990). This finding was unexpected. This finding, however, could have something to do with the way people with anxious attachment style handle relationships. People who are anxiously attached may go to others for emotional intimacy and reassurance (Littman-Ovadia et al., 2013, Joeng et al., 2017).

For hypothesis 2, work performance was anticipated to be higher when psychological well-being at work was higher. The happy-worker theory, which holds that higher psychological well-being is linked to improved work performance, is further supported by this data (Kundi et al., 2021; Oades et al., 2016; Wright et al., 2007). Workers may have more internal resources available to them for work performance if they support higher levels of psychological well-being at work. Employees with higher psychological well-being at work may be better able to concentrate on work-related tasks, which could result in improved work performance, since they won't have to use internal resources to deal with emotional anguish.

For hypothesis 3, anxious and avoidant attachment styles both showed notable indirect effects. The association between avoidant attachment and work performance was found to have a substantially detrimental indirect influence on psychological well-being at work. The results are consistent with the premise that psychological well-being and work performance decline with an increase in avoidant attachment. Since people with anxious attachment show more desire for social interaction and reassurance from colleagues (Shaver & Mikulincer, 2005; Landen & Wang, 2010; Little et al., 2010), it is plausible that the more anxiously attached an employee is, the more they want to be involved at work, which may lead to higher psychological well-being levels after work performance. Anxiously attached employees may benefit from their increased drive for harmonious relationships with coworkers, which leads to higher levels of psychological well-being and work performance, particularly when compared to avoidant attached employees who may be less motivated for social involvement at work.



Suggestions

1. Suggestions for Further Actions

This study advances the fields of business psychology and organizational leadership by emphasizing how crucial it is to promote organizational outcomes by attending to staff psychological well-being. The association between work performance and attachment style is found to be significantly mediated by psychological well-being at work. Companies looking to improve productivity and profitability might gain from creating procedures, policies, and programs that promote staff psychological health and attachment style at work.

Reducing and controlling hazards associated with perceived losses is another way that organizations can support the attachment style of their staff. According to Grady (2019), "an emotional impact related to 'loss' emerges in employees' behavior when aspects of organizational life to which individuals have attached are altered, changed, or removed" (p. 103). Employees can develop attachments to norms, values, concepts, rituals, routines, policies, procedures, structures, symbols, and the physical environment, just as they might to other members of the organization (Grady, 2019). When faced with organizational change, individuals who have grown devoted to certain features of the company may face serious difficulties.

2. Suggestions for Further Studies

- 1. The study's findings suggest that psychological health at work has a big influence on productivity. The association between attachment type and individual work performance can be explained by psychological well-being at work, which is a crucial mediator. It would be advantageous to repeat this study using a different work performance metric because self-report surveys have limitations. Participants' assessments of their work performance may have been skewed due to social desirability bias, which could have influenced the study's important findings (Grimm, 2010). The findings of this study may be supported by objective assessments of work performance or supervisor ratings.
- 2. Future studies could also examine the effectiveness of workplace interventions and programs intended to promote staff psychological health and attachment style. Further knowledge on particular interventions that support employee health and work performance may be gained by creating and implementing a program that is expressly intended to enhance staff healthy attachment and improve psychological well-being at work.



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Chinese Traditional Bamboo Furniture: Aesthetic, Symbolics, and Utilization of

Material Culture in the Past

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Abstract

"Chinese Traditional Bamboo Furniture: Aesthetic, Symbolics, and Utilization of Material Culture in the Past" is a qualitative research, focusing on the study of 'Chinese Traditional Bamboo Furniture' as 'Material Culture in the Past' to understand the relationship and interaction between Chinese Traditional Bamboo Furniture and the life and society of the Chinese people in the past, which reflects the aesthetic characteristics of design, shape, and intelligent production techniques. In addition, different styles of bamboo furniture also contain symbolic systems that can determine the status and status of the users, as well as the ancient Chinese philosophical meanings embedded in the cultural objects "bamboo". Therefore, this research not only drives the aesthetic innovation and market development in the furniture industry, but also elevates furniture beyond the scope of use, turning furniture into a medium of cultural symbols and artistic expression. In this integration process, the elements of bamboo, which are materials with profound cultural meanings, have been widely and uniquely used in Chinese-style furniture. Bamboo, as an important symbol in traditional Chinese culture, not only has the dual meaning of nature and spirit, but also deeply represents cultural identity.

Keyword: Chinese Traditional Furniture, Aesthetic, Symbolics, Material Culture



Introduction

Chinese traditional bamboo furniture, as a unique presence in China's tangible cultural heritage, was once extensively utilized and became an indispensable part of people's daily lives. It is not only a vivid manifestation of material culture but also contains rich aesthetic values and profound cultural symbolic meanings. Through Chinese traditional bamboo furniture, we can delve deeply into the lifestyle and social structure of ancient Chinese society.

From an aesthetic perspective, the design of bamboo furniture is ingenious, with natural and elegant forms, and the craftsmanship is exquisite and unparalleled. These qualities not only reflect the ancient people's profound understanding of aesthetics but also demonstrate the superb craftsmanship deeply ingrained in China's material culture after centuries of accumulation. Each piece of bamboo furniture seems to be a perfect fusion of nature and human wisdom, radiating a simple, pure, and essential beauty that returns to the essence.

At the cultural symbolic level, bamboo furniture, besides serving practical functions, also constructs a complex and exquisite symbolic system. As a typical representative of the cultural background and aesthetic orientations of different times, countries, and ethnic groups, furniture presents diverse design styles in various periods, regions, and among different ethnicities (Tao Yun, Chen Rui, Qiu Zhitao, 2006). Bamboo furniture of different styles not only corresponds to the socio-economic conditions of different social classes but also becomes a distinctive symbol of status and hierarchy. A deep exploration of the cultural imagery of "bamboo" reveals its philosophical foundation rooted in ancient Chinese thought. In Chinese culture, bamboo has always been seen as a symbol of integrity, resilience, and humility, and these valuable values are subtly incorporated into the design and production of bamboo furniture. When people use bamboo furniture, they are invisibly influenced by these values.

Chinese traditional bamboo furniture, as a key bearer of past material culture, carries historical memories and cultural heritage of Chinese society. As a unique cultural symbol, it evokes a strong sense of identity and belonging among people.



Objective

This study takes traditional Chinese bamboo furniture as the research object and conducts in-depth exploration from three dimensions.

First, the aesthetic characteristics of bamboo furniture are deeply analyzed to show its status in the traditional aesthetic system.

Second, the symbolic meaning contained in bamboo furniture is explored to explore how the shape and style of traditional Chinese bamboo furniture convey social status, moral norms and cultural identity.

Third, in the historical context, the use of bamboo furniture as material culture in daily life and social practice is analyzed, representing cultural identity.

Research Methodology

This article adopts a qualitative research approach, focusing on "Chinese traditional bamboo furniture" as an aspect of "past material culture" to explore the relationships and mutual influences between Chinese traditional bamboo furniture and the lives and society of past Chinese people. The research delves into different dimensions of cultural memory by analyzing the symbolic meanings, aesthetic values, and material cultural utilization of bamboo furniture in past contexts. Data collection is primarily based on academic literature and interviews with scholars. The findings of the study are presented in a descriptive analytical format.

Results

1. Utilization of Bamboo Furniture in Material Culture

In the past, traditional Chinese furniture made of bamboo, as an integral part of material culture, was a reflection of the living customs and aesthetic art of the Chinese nation (Qiang, Zhou, Su, & Yuan, 2022). The unique properties of bamboo not only make it practical, but also play an important role in cultural identity, spatial construction, and social interaction.

1.1 Functionality and Technicality

Bamboo furniture is widely used in daily life due to its functionality and adaptability to space. Bamboo chairs and stools are lightweight and adaptable to the needs of home and public spaces, especially for flexible use in indoor and outdoor transitions. Bamboo beds are cool and



pleasant, meeting the need for sleep in hot seasons, while bamboo cabinets and boxes are ventilated to effectively keep items dry and mold-free in humid climates. These designs not only demonstrate the practicality of bamboo furniture, but also reflect its flexible adaptability and efficiency in different life scenarios.

1.2 Social Stratification and Identity Construction

From a sociological perspective, bamboo furniture not only meets daily needs, but also reflects differences in social classes. Bamboo furniture in peasant families is mostly simple in design, while in scholar families it may be more sophisticated, carrying the function of symbolizing status and cultural taste. This change reveals the multiple roles of bamboo furniture in different social groups, shaping the living pattern, and reflecting the transmission of social structure and cultural values. As a carrier of material culture, bamboo furniture carries multiple meanings of history, technology and social interaction, and shapes the lifestyle and cultural identity of traditional Chinese society.

- 2. The Aesthetic Significance of Bamboo Materials in Traditional Chinese Furniture
- 2.1 A Dialogue Between Natural Beauty and Craftsmanship Aesthetics

The aesthetic status of bamboo in traditional Chinese furniture stems from the deep integration of its natural beauty and cultural connotation. The smooth and delicate surface of bamboo and its varied textures embody the philosophical idea of "harmony between man and nature" and highlight the aesthetics of harmonious coexistence between nature and humans. Its textures, such as knots and growth rings, not only add a sense of visual layering, but also provide a rich tactile experience, becoming an indispensable element in the design.

The natural characteristics of bamboo complement the simple design concept, cleverly balancing elegance and simplicity, retaining the original beauty, while incorporating the aesthetics of craftsmanship. Simple lines and undecorated surfaces highlight the characteristics of the material itself, avoid redundant decoration, and embody the design principle that form follows function. The simple style of bamboo furniture not only fits the traditional family space layout, but also creates a natural and harmonious atmosphere, improves the overall aesthetic quality of the living environment, and becomes an indispensable aesthetic symbol in traditional Chinese families.



2.2 Bamboo Furniture as a Medium for Artistic Expression

Traditional Chinese furniture reflects the living customs and aesthetic art of the Chinese nation (Qiang, Zhou, Su & Yuan, 2022). Artisans use a variety of techniques such as bending, weaving and carving to create intricate patterns and forms that showcase their skills and creativity. Many of these designs incorporate symbolic motifs such as plum blossoms, cranes or pine trees, which carry additional cultural significance. For example, a crane carved into a bamboo table may represent longevity and prosperity. These artistic elements elevate bamboo furniture from a practical household item to a cultural artefact with multiple layers of symbolic meaning. Bamboo furniture is both a reflection of material culture and a symbol of cultural identity.

3. The Symbolic Meaning of Bamboo in Traditional Chinese Furniture

Bamboo is not only a material in traditional Chinese furniture, but also a symbol with profound cultural significance. For thousands of years, bamboo, as a symbol of Chinese culture, has been closely linked to art, philosophy and spiritual values, carrying cultural memory, enhancing aesthetics and happiness, and becoming a bridge for international cultural exchanges (Guo Chunfang and Xu Jiayi, 2024). Beyond aesthetic appeal, bamboo symbolizes core values such as tenacity, perseverance, humility and moral integrity.

3.1 Bamboo as a Symbol of Virtue

In Chinese culture, bamboo symbolizes tenacity, humility and integrity, virtues deeply rooted in Confucian and Taoist thought. Bamboo stands tall and straight, and can bend in the wind without breaking, symbolizing tenacity and grace in the face of adversity, and its durability and crack resistance also reflect this spirit. The simple appearance of bamboo conveys the beauty of humility, which fits the Confucian concept that inner virtues are superior to outer performance, making it an ideal material for furniture with low-key dignity. At the same time, the uprightness of bamboo symbolizes moral integrity, and its design reflects the profound pursuit of morality and code of conduct in traditional furniture.

3.2 Bamboo in Furniture Design and Cultural Identity

In traditional Chinese furniture, bamboo is not only a practical material, but also a symbol of cultural identity, showing the cultural value of harmonious coexistence between man and nature. Bamboo furniture was closely related to the scholar class in the Tang and Song dynasties. It was often used to make bamboo chairs, bamboo tables, etc., symbolizing the ideal of refinement



and knowledge. In the Ming and Qing dynasties, bamboo furniture became a symbol of high status and elegant taste due to its exquisite design and exquisite craftsmanship, transcending functionality to reflect social identity and cultural refinement. Bamboo furniture also carries core values such as simplicity and harmony in the family space, and is an important carrier of traditional Chinese culture.

Discussion and Conclusion

This study takes "traditional Chinese bamboo furniture" as the research object of "ancient material culture", explores its interaction with ancient Chinese life and society, and shows the aesthetic characteristics of design, modeling and production technology. At the same time, bamboo furniture contains identity symbols and philosophical meanings, transcending practical functions and becoming a medium for cultural symbols and artistic expression. As a cultural symbol, bamboo not only embodies the dual meanings of nature and spirit, but also deeply represents the identity connotation of Chinese traditional culture.

Suggestion

Future research on traditional Chinese bamboo furniture can focus on how it adapts to contemporary needs and explore how its aesthetics, symbolism and function can provide inspiration for modern sustainable design. Combining traditional Chinese philosophy such as "harmony between man and nature" with modern design concepts such as minimalism and environmentally friendly materials, bamboo furniture can become a model of inheritance and innovation. At the same time, interdisciplinary research involving materials science, cultural anthropology and industrial design can help deepen the understanding of bamboo's potential in modern furniture production and promote its revival around the world.

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Family Relations on Academic Performance and Personality of Undergraduates in Cambodia

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Abstract

Family relations plays a significant role in contributing to the children's personality development and their academic performance. The different types of personality traits, along with the level of academic performance, lead to career success and prosperity in life. This paper aimed to examine the correlation between family relations and students' academic performance and personality. The research study primarily focused on 3,000 undergraduate students at a private university in Cambodia, with a sample size of 100 students from various faculties. Among the sample size, there were 32 students who were freshmen, 25 who were sophomores, 15 who were juniors, and 29 who were seniors. There were 31 male students, and 69 were female students. In addition, this study employed survey questionnaires as the main research instrument, with three main parts: family relations, academic performance, and personality. The data analysis used the inferential statistic (correlation coefficient) to analyze the primary data. The result of this study revealed that there was a statistically significant correlation between family relations and the academic performance and personality of the undergraduates at the university being studied.

Keyword: Family Relations, Personality, Academic Performance



Introduction

The family environment significantly influences successful academic performance. In both Asian and Western countries, academic success has been found to be predicted by a number of family characteristics, including family structure, socioeconomic level, parental school engagement, parental relationship quality, and family relations. The children's environment, particularly the family atmosphere, has a significant impact on how they develop their personalities (Zografova et al., 2019).

In addition, Nakao et al. (2000) state that the home environment has an influence on a student's personality attributes. Considine and Zappalà (2002) proved that the family who had taken good care of their children impacted the student's academic performance. The children who were born and live with a good family who spent time educating, motivating, inspiring, and encouraging them are going to perform well in their academic journey. According to the initiative of the Ministry of Education Youth and Sports (MoEYS) with the slogans of "Education for All" and "Education Starts from Home," it is noticeable that the home environment is an extremely important factor that might influence the children's academic performance and personality development (Kakkar, 2026; Mammadov et al., 2018).

In Cambodia, most students stay with their families from when they are born until they finish their studies, or even after they get married. According to UNICEF (2018), over 75% of children in 2014 lived with both parents, making up 89% of all children living with at least one parent. According to the researcher's perspective, knowledge, and experiences, this study may be regarded as an initial investigation into the family relation factors on a student's personality and academic performance in Cambodia. In addition, using all the results of the research study, parents all over the country can establish and sustain healthy parent-child relations in the family to enhance undergraduates' personality in a positive direction and accomplish a higher level of academic performance henceforward.

Research Objective

The purpose of this quantitative correlational study was to examine the correlation of family relations on the academic performance and personality of undergraduates.



Research Questions

- 1. Is there any significant correlation between family relations and student's academic performance?
 - 2. Is there any significant correlation between family relations and student's personality?

Research Hypotheses

Referring to the research question above, the hypotheses were addressed:

H0₁: There is no statistically significant correlation between family relations on student's academic performance.

 $\mathrm{H0}_2$: There is no statistically significant correlation between family relations on student's personality.

Literature Review

1. Family Relations

Family is a system made up of parents, children, and siblings, and this system is affected by each other and impacts each other. Family is described as a social institution that begins before the birth of individuals and retains its effect until the end of their lives (Uzun et al., 2021). A child's personality characteristics and socialization are greatly influenced by communication and interactions within the family. The family relationship is the relationship between husband and wife, siblings, and children and their parents.

Both good and bad effects on the home environment can be attributed to husband and wife interactions. A close, fulfilling relationship between parents typically reflects a pleasant and supportive home environment. Noller and Victor (1991) claim that a family's atmosphere is determined by how satisfied the parents are with their marriage. Children are traumatized by parental domestic violence, and the long-term effects may be harmful to the family structure and the children's growth. According to Emery and Leary (1984), family conflict is associated with behavioral issues in kids and teenagers.

One of the relationships that lasts the longest and has the capacity to affect all facets of a person's life is the sibling bond (Fortuna et al., 2011). During adolescence, sibling relationships have traits that differentiate them apart from friendships and relationships with parents (Kramer &



Conger, 2011). Adolescents frequently have emotionally intense sibling relationships that are characterized by competition and conflict, as well as by nurturing and support (Campione-Barr & Smetana, 2010). Adolescent siblings can serve as rivals, emotional supports, and communication partners. Sibling relationships can take many different forms, including sharing, helping, arguing, teaching, and playing. Positive sibling relationships also support teenagers' sociability, health, autonomy, and sense of self-worth (McHale et al., 2012).

At the ages of 14 to 15 years old, children spend more time with their parents. When children reach puberty, it is the least time with their parents (Laurence, 2017). It is widely accepted that parents play a key role in a child's psychological and behavioral well-being. In addition, research has also shown that successful students have strong academic support from their involved parents (Epstein et al., 2018). Parents who have close relationships with their children have time to monitor, guide, and educate the children from home. According to the study, students' academic performance improves when parents participate in their children's educational activities, show their children affection, attend school events, are democratic and responsive, and maintain high educational expectations (Jaiswal & Choudhuri, 2017).

2. Personality

Kinicki and Fugaet (2017) claim that personality is the stable combination of a person's physical, behavioral, and mental traits that give them their unique identities. There are many traits that children get from their parents, and according to Gruseck and Hastings (2007), "socialization is the process through which a youngster creates his own personality." Feher and Vernon (2021) described the "big five" personality traits, which have been connected to a range of psychological outcomes including job satisfaction, relationship satisfaction, leadership, internet addiction, educational outcomes, and health outcomes, highlighting the significance of this personality model in our comprehension of human nature.



Table 1

Costa and McCrae's Five-Factor

Personality	Hight Score	Low Score
Extraversion	affectionate	reserved
	joiner	loner
	talkative	quiet
	fun loving	sober
	active	passive
	passionate	unfeeling
Neuroticism	anxious	calm
	temperamental	even-tempered
	self-pitying	self-satisfied
	self-conscious	comfortable
	emotional	unemotional
	vulnerable	hardy
Openness	imaginative	down-to-earth
	creative	uncreative
	original	conventional
	prefers variety	prefers routine
	curious	uncurious
	liberal	conservative
Agreeableness	softhearted	ruthless
	trusting	suspicious
	generous	stingy
	acquiescent	antagonistic
	lenient	critical
	good-natured	irritable



 Personality	Hight Score	Low Score	
Conscientiousness	conscientious	negligent	
	hardworking	lazy	
	well-organized	disorganized	
	punctual	late	
	ambitious	aimless	
	persevering	quitting	

Source: (Feist, Feist, & Roberts, 2018)

3. Academic Performance Indicator

Academic performance is measured by using performance in tests, performance in coursework, and performance in examinations (Kyoshaba, 2009). The test is used to examine a student's knowledge of what the student knows or learns; it measures the level of the student's understanding in class. The test was conducted at the end of the lesson of the class. The performance in coursework is one of the key indicators to measure student performance in this study. Students who are studying at the undergraduate level must meet all the coursework requirements from the university. There are two examinations every semester for undergraduates. The university requires the students to take the mid-term tests and the final examinations; it is a centralization examination at the university.

Research Methodology

This research study employed a quantitative method because its aim is to investigate the relationship variables and test the hypothesis. Correlational designs provide an opportunity for the researcher to predict scores and explain the relationship among variables. In correlational research designs, investigators use the correlation statistical test to describe and measure the degree of association (or relationship) between two or more variables or sets of scores. In addition, the correlation design includes specific characteristics such as the displays of scores, associations between scores, and multiple variable analysis (Creswell, 2015).

The research questionnaires were used as an instrument to collect the data that were organized into three main parts, as described in Table 2 below.



Table 2

Research Instrument

Instrument	Description	Number of items	Adopted
A	Family Relations	24	Hudsen (1982)
В	Personality	41	Goldberg (1999)
C	Academic Performance	5	KYOSHABA (2009)

The questionnaire in Part A consisted of 24 items, and it was used to collect data related to family relations. The respondents' choices were demonstrated on a five-point scale, which explains that 5 is for all of the time, 4 is for "a good part of the time," 3 is for "some of the time," 2 is for "a little of the time," and 1 is for "none of the time.". It was originally developed by Hudsen (1982) with a Cronbach's alpha of 0.82.

The questionnaire in Part B was about personality. There were five main types of personality, including Openness, Extraversion, Conscientiousness, Emotional Stability, and Agreeableness. There was a total of 41 items in this part of the questionnaire with 7 items for Openness, 9 items for Extraversion, 10 items for Conscientiousness, 8 items for Emotional Stability, and 7 items for Agreeableness. The respondent choices were demonstrated on a five-point scale, which explained that 1 is for "very inaccurate," 2 is for "moderately inaccurate," 3 is for "neither accurate nor inaccurate," 4 is for "moderately accurate," and 5 is for "very accurate.". This part of the research instrument was originally developed by Goldberg (1999) with a Cronbach's alpha of 0.792.

The last part of the research questionnaire was Part C, Academic Performance. It contained five main items, including lesson tests, course work, midterm and final examinations, core and compulsory courses, and grade point average (GPA). This part of the instrument was developed by Kyoshaba (2009), and it had a Cronbach's alpha of 0.778.

To ensure the validity and reliability of the surveyed questionnaire; the current study checked IOC and Cronbach's alpha. The IOC (Item-Objective Congruence) is used in test preparation to assess content validity at the item development stage. In addition, a survey questionnaire was used to measure the reliability through a pilot study by calculating Cronbach's alpha.



Population and Sample

The population for this study consisted of 3,000 undergraduate students from a private higher education institution in Cambodia. The undergraduates selected for the sample were 100 students from the freshmen, sophomore, junior, and senior classes to participate in this research study via a non-probabilistic snowball sampling.

Data Analyses

The inferential statistic was used to analyze the primary data. Ganti (2020) explained the correlation coefficient is a statistical measure of the strength of the relationship between two continuous variables. The values of a Pearson correlation coefficient range between -1.0 and 1.0. A correlation of -1.0 shows a perfect negative correlation, while a correlation of 1.0 shows a perfect positive correlation. Cresswell (2015) stated that a p-value is the probability (p) that a result could have been produced by chance if the null hypothesis were true. Lind, Marchal, and Wathen (2017) provided that by comparing the p-value with the level of significance 0.05 (alpha), the null hypothesis can be rejected if the p-value is less than alpha (p-value $\leq \alpha$). However, the null hypothesis cannot be rejected if the p-value $\geq \alpha$.

Research Results

 $\mathrm{H0}_{1}$: There is no significant correlation between family relations on student's academic performance.

Table 3

Correlation between Family Relations and Student's Academic Performance

Correlation Matrix		Family Relations	Student's Academic Performance
Family relations	Pearson Correlation	1	.378**
	Sig. (2-tailed)		.000
	n	100	100
Student's Academic	Pearson Correlation	.378**	1
Performance	Sig. (2-tailed)	.000	
	n	100	100

^{**.} Correlation is significant at the 0.01 level (2-tailed).



Table 3 shows the correlation between the variables of family relations and student's academic performance. The Pearson Correlation Coefficient was r=0.378, p=0.000, and n=100. The p-value of the correlation is less than 0.01; thus, it was statistically significant.

H0₂: There is no significant correlation between family relations on student's personality.

Table 4

Correlation between Family Relations and Student's Personality

Correlation Matrix		Family Relations	Student's Personality
Family Relations	Pearson Correlation	1	.362**
	Sig. (2-tailed)		.000
	n	100	100
Student's Personality	Pearson Correlation	.362**	1
	Sig. (2-tailed)	.000	
	n	100	100

^{**.} Correlation is significant at the 0.01 level (2-tailed).

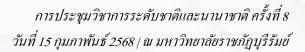
Table 4 shows the correlation variables of family relations and student's personality. The Pearson Correlation Coefficient was r=0.362, p=0.000, and n=100. The p-value of the correlation is less than 0.01; thus, it was statistically significant.

Discussion and Conclusion

Table 5

The Thematic Discussion

	Variable	Researcher	Results
			Relationships significantly and
D 11 1 1	1: (2022)	positively affected academic	
	Family relation	Li et al. (2022)	performance.





Variable	Researcher	Results
		Parent-child relations can directly
	Carmona et al. (2020)	predict a student's academic
		performance.
	Obeldobel and Kerns, (2021)	Parent-child relations directly affect
		academic performance.
	Zhang et al. (2018)	Parent-child relations were significantly
		correlated with personality traits.

Table 5 discusses the results compared with the findings from different authors. The finding indicates that family relations affect children's academic performance. A number of previous studies supported this finding that proved the correlation between family relations and academic performance. For instance, this result conforms to the finding by Obeldobel and Kerns (2021) that parent-child relations do not only directly affect academic performance but also an individual's positive emotions. Moreover, Carmona et al. (2020) have also found that parent-child relations can directly predict a student's academic performance. Another research study by Li et al. (2022) has also provided a similar result that the parent-child relations significantly and positively affected the academic performance of college students. The academic achievement of the undergraduate students in this study is definitely affected by their family relations. To exalt learning, a home environment must be positively created where comfort, understanding of each other, and deeper relationships among siblings and parents are formed.

The study has also found that family relations also affect students' personalities. Findings of the previous studies have found similar results to this study. For example, Zhang et al. (2018) found that there was a significant correlation between family relations and a student's personality traits. Yadav (2020) has found that different types of families have become significant influencing factors in children's personality traits. This indicates that family has a strong impact on the personality of children, which conforms to this study's findings. In conclusion, family relations are considered an important aspect since they are related to a student's academic performance and personality. A strong connection to family relations is the key to academic success and personality development.



Suggestions

1. Suggestions for Future Practices

Parents are the main individuals responsible for raising children from birth in every community; the family is acknowledged as a significant socialization force. Encouraging healthy parent-child interactions in family situations is the priority for building good family relations. In order to create great parent-child communication and a family environment, stakeholders could encourage parents to listen to their children's opinions, keep up with the times, improve their ability to accept new things, new dynamics, and new lifestyles, and avoid adherence to old ways and parental authority.

2. Suggestions for the Future Study

The research proved that there was a statistically significant between family relations on academic performance and personality of undergraduates. Future studies should be conducted in different contexts, using various educational theories, and employing other statistical tools. Future researchers could replicate their study in another setting or sample in order to verify the results of this present study. In addition, it is advised that larger samples be used in future research, and data should be gathered from a variety of universities to increase the study's generalizability in the Cambodian context.

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Engaging EFL Learners: The Power of Active Learning Strategies

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Abstract

This article explores the role of active learning strategies in English as a Foreign Language (EFL) classrooms. Active learning, characterized by student engagement, interaction, and experiential activities, enhances language acquisition by fostering critical thinking, motivation, and collaboration. Various active learning strategies, including cooperative learning, problem-solving, role-playing, and technological integration, are examined in relation to their effectiveness in improving language skills. This article synthesizes empirical findings from multiple sources to highlight the transformative impact of active learning on EFL learners' motivation, cognitive development, and communication skills.

Keyword: Active Learning, English as a Foreign Language (EFL), Student Engagement, Language Acquisition, Cooperative Learning

I. Introduction

In contemporary education, the demand for effective teaching methodologies has intensified, especially in English as a Foreign Language (EFL) instruction. As student-centered learning gains recognition, strategies that actively engage learners have emerged as powerful tools for enhancing language acquisition and building confidence. Research consistently shows that active learning deepens comprehension and develops critical thinking and collaboration skills, essential for effective communication. By creating dynamic and interactive environments, these approaches challenge traditional, passive learning models, motivating students to overcome



linguistic barriers. Exploring active learning strategies is thus crucial for educators aiming to refine instructional practices and foster sustained engagement and proficiency development.

A. Definition of Active Learning in EFL Contexts

Active learning extends beyond traditional methods, fostering deeper engagement in EFL instruction. This approach emphasizes student participation, allowing learners to construct knowledge through interaction and experiential learning. In EFL contexts, the interactive nature of active learning is vital for language acquisition, as it promotes collaboration and critical thinking, foundational for effective communication. Research suggests that active learning improves student outcomes and reduces failure rates, particularly where motivation and engagement are key to language proficiency (Al-Shihri, 2019). Integrating technology and innovative pedagogical techniques further enhances learning by combating passivity and disengagement, fostering a dynamic and responsive educational environment.

B. Importance of Engagement in Language Learning

Engagement is critical in improving language learning outcomes for EFL students. Active methodologies, such as cooperative learning and technology integration, boost motivation, participation, and confidence. Studies show that engaged students are more likely to retain language concepts and enjoy the learning process. Mohammed and Al-Hassan (2023) found that active learning significantly enhances motivation and skills, demonstrating that active participation leads to better retention. Furthermore, these interactive approaches support the development of soft skills, positioning engagement as a core element of effective language instruction. Such methodologies align with broader goals of cultivating language proficiency across diverse educational contexts.

C. Overview of the Article

This article explores how active learning enhances language proficiency while addressing challenges like public speaking anxiety. It begins by establishing the importance of active learning in EFL, followed by a discussion of specific strategies supported by empirical research. The analysis then examines learner experiences, illustrating how engagement fosters language acquisition. The conclusion synthesizes key insights, reinforcing the value of active learning and advocating for continued research to expand its application in various educational settings.



II. Theoretical Framework of Active Learning

Integrating active learning into EFL instruction transforms traditional education by fostering student engagement, confidence, and communication skills. This approach is particularly effective in language acquisition, where interactive learning helps students construct knowledge through collaboration and reflection. Research highlights that Think-Pair-Share and peer feedback significantly enhance engagement and comprehension (Mohammed & Al-Hassan, 2023). Additionally, integrating technology increases motivation and interaction, addressing gaps in traditional learning methods (Cabrera-Solano et al., 2020). Active learning, including formative assessments and problem-based tasks, also strengthens critical thinking and self-efficacy (Fayombo, 2012). By fostering an interactive and anxiety-reducing environment, these strategies equip EFL learners with the skills needed for effective real-world communication.

A. Constructivist Learning Theory and Its Relevance

At the core of active learning lies Constructivist Learning Theory, which emphasizes that knowledge is actively built through interaction and experience rather than passively received. This principle is crucial in EFL instruction, where social engagement and meaningful participation drive language retention (Gholami, 2014).

Constructivist approaches also address common challenges in EFL learning, such as language anxiety and lack of confidence. By engaging in collaborative learning tasks like peer feedback, discussions, and group projects, students actively process language in authentic, communicative settings, which improves fluency and confidence in speaking (Junejo & Jaleel, 2022).

Additionally, problem-solving tasks and role-playing exercises provide learners with real-world contexts for language use, reinforcing long-term retention and comprehension. This aligns with research indicating that active, socially driven engagement reduces public speaking anxiety and improves linguistic performance (Al-Shihri, 2019).

B. The ICAP Framework: Modes of Engagement

The ICAP framework (Chi, 2014) categorizes cognitive engagement into four levels: Passive, Active, Constructive, and Interactive, each influencing learning outcomes differently. Transitioning from passive to interactive learning enhances language acquisition, particularly for EFL learners facing anxiety and motivation barriers (Mohammed & Al-Hassan, 2023).



- Passive: Students receive information without interaction (e.g., listening to lectures).
- Active: Students engage physically (e.g., underlining texts, repeating words).
- Constructive: Students generate new understanding (e.g., summarizing, self-explaining).
- Interactive: Students collaborate, engage in discussions, and co-construct knowledge.

The benefits of progressing toward interactive learning are particularly significant for EFL learners. Research confirms that moving from passive instruction to interactive strategies (e.g., Think-Pair-Share and peer discussions) significantly enhances oral proficiency and speaking confidence (Al-Shihri, 2019).

Furthermore, constructive engagement techniques, such as reflective writing and language synthesis activities, improve grammar proficiency and comprehension (Fayombo, 2012). By fostering interactive and constructive engagement, active learning equips students with essential real-world communication skills while reducing performance-related stress in language use (Junejo & Jaleel, 2022).

C. Technology-Enhanced Active Learning and Motivation

Technology plays a pivotal role in enhancing active learning by providing interactive digital environments that promote engagement and motivation in EFL learners. Digital platforms such as Formative allow educators to design interactive, formative assessments that encourage real-time participation and deepen language comprehension (Cabrera-Solano et al., 2020).

The integration of technology also addresses common EFL challenges, such as speaking anxiety and low participation rates. Research indicates that students using mobile applications and online collaborative tools (e.g., discussion forums, peer reviews) show higher engagement and reduced fear of making mistakes in speaking activities (Junejo & Jaleel, 2022).

Moreover, technology-facilitated problem-solving tasks and gamified learning further boost self-efficacy and long-term retention (Mohammed & Al-Hassan, 2023). By blending active learning principles with digital tools, educators can create student-centered learning environments that foster motivation, confidence, and linguistic competence.

III. Active Learning Strategies in EFL Classrooms

The evolving landscape of English as a Foreign Language (EFL) education requires a shift from traditional, lecture-based instruction to interactive frameworks that enhance student



engagement. Active learning strategies not only improve comprehension but also build confidence and critical thinking skills. Approaches like Think-Pair-Share and project-based learning create collaborative environments where students actively apply language skills in meaningful contexts. Additionally, integrating mobile technology into these strategies significantly reduces anxiety and increases motivation (Chi, 2014). This dynamic approach fosters both linguistic proficiency and soft skills, enriching the overall educational experience.

Research supports the effectiveness of interactive methodologies in EFL classrooms. Okada (2022) highlights that learning is inherently social and becomes more meaningful when students collaborate on real-world projects, such as the open schooling approach. These findings align with studies demonstrating that active learning fosters engagement, motivation, and improved language retention (Cabrera-Solano et al., 2020; Al-Shihri, 2019). By adopting these strategies, educators can enhance communication skills while preparing students for authentic, real-world interactions.

A. Collaborative Learning Techniques

Collaborative learning techniques, such as group work and peer teaching, create interactive and supportive environments that foster both language acquisition and interpersonal skills. Group activities expose students to diverse perspectives, improving their understanding and retention of linguistic concepts. Peer teaching, in particular, encourages learners to take ownership of their learning, reinforcing their knowledge by explaining concepts to classmates, creating a dynamic cycle of learning and teaching (Gholami, 2014).

Additionally, collaborative learning boosts confidence, reduces anxiety, and cultivates a sense of community, leading to better language outcomes (Fayombo, 2012; Prince, 2004). Activities like group discussions and cooperative exercises help students refine communication skills, making them more proficient in expressing ideas. Given these benefits, integrating collaborative techniques into EFL instruction actively engages learners and enhances language acquisition.

B. Technology-Enhanced Learning

The integration of digital tools and online platforms is transforming EFL education by making active learning strategies more accessible and engaging. Interactive platforms such as Formative enable educators to design real-time assessments, helping students actively engage with



material and improve retention (Cabrera-Solano et al., 2020). Additionally, these technologies create collaborative spaces where learners interact, share ideas, and receive immediate feedback, addressing challenges associated with traditional instruction (Junejo & Jaleel, 2022).

Technology facilitates deeper engagement and critical thinking by enhancing peer discussions and project-based learning. Moreover, it fosters learner autonomy and motivation, key components for success in today's digital and globalized educational landscape (Mohammed & Al-Hassan, 2023). As technology continues to advance, integrating these tools effectively will enrich the EFL learning experience and better equip students for global communication.

C. Interactive Activities

Interactive activities like Think-Pair-Share and role-playing play a pivotal role in developing communicative competence and reducing anxiety among EFL learners. These techniques encourage active engagement with both content and peers, creating a dynamic learning environment conducive to language acquisition. Research indicates that peer interactions during Think-Pair-Share enhance comprehension and reinforce the social aspects of language learning (Mohammed & Al-Hassan, 2023).

Similarly, role-playing immerses students in real-world scenarios requiring critical thinking, problem-solving, and improvisation, further strengthening speaking and listening skills (Silva, 2023). Engaging in structured, interactive dialogues fosters confidence and reduces public speaking anxiety, both essential for effective second-language communication (Chi, 2014). These learner-centered approaches align with active learning principles, helping students internalize language structures while improving long-term retention (Fayombo, 2012).

As EFL education continues to evolve, integrating interactive activities will be essential for equipping students with practical communication skills needed for both academic and real-world contexts..

IV. Impact of Active Learning on EFL Learners

Active learning strategies have transformed EFL education by enhancing student engagement, motivation, and language proficiency. Methods such as group discussions and peer feedback encourage active participation, increasing students' willingness to communicate. Research highlights that shifting from passive learning to interactive engagement fosters critical



thinking and collaboration, aligning with the ICAP framework, which emphasizes deeper cognitive processing through meaningful interaction (Chi, 2014). Technology, including mobile applications for peer interaction, further strengthens engagement and reduces language anxiety. This shift not only improves language skills but also builds students' confidence in real-world communication (Mohammed & Al-Hassan, 2023; Al-Shihri, 2019).

A. Improvement in Language Proficiency and Communication Skills

Active learning significantly enhances language proficiency and communication skills by immersing students in collaborative, problem-solving discussions and peer interactions. Methods like Think-Pair-Share reduce anxiety and boost confidence, leading to improved oral proficiency (Biletska et al., 2021). Digital platforms such as Formative promote interactive learning, helping students articulate thoughts and engage effectively with peers (Cabrera-Solano et al., 2020). These strategies shift learning from passive absorption to experiential engagement, reinforcing deeper comprehension and practical language application (Mohammed & Al-Hassan, 2023). Ultimately, active learning equips students with the communication competencies necessary for real-world interactions (Fayombo, 2012).

B. Increased Motivation and Willingness to Communicate

Active learning fosters greater motivation and willingness to communicate by involving students in meaningful, interactive tasks. Activities like debates, role-playing, and group problem-solving lower communication barriers and build confidence (Mohammed & Al-Hassan, 2023). Research indicates that learners exposed to these methods take more risks in language use, resulting in improved oral proficiency and reduced anxiety (Biletska et al., 2021; Al-Shihri, 2019). Additionally, collaborative learning cultivates a sense of community, encouraging students to engage more actively in discussions. By integrating such strategies, educators can create a dynamic classroom atmosphere that transforms students' attitudes toward communication, making them more confident in expressing themselves in English.

C. Development of Critical Thinking and Problem-Solving Skills

EFL education is shifting from rote memorization to active learning strategies that foster critical thinking and problem-solving. Methods like Think-Pair-Share and problem-based learning enhance collaboration and deeper understanding (Mohammed & Al-Hassan, 2023). Role-playing and debates further strengthen analytical skills, encouraging students to evaluate diverse



perspectives (Silva, 2023). The ICAP framework supports this approach, emphasizing that deeper engagement through interactive and constructive learning leads to stronger cognitive development (Chi, 2014). These strategies not only improve language proficiency but also equip students with essential problem-solving abilities for real-world communication.

V. Conclusion

This study highlights the pivotal role of active learning in EFL education, linking it to increased motivation, engagement, and language acquisition (Chi, 2014; Silva, 2023; Biletska et al., 2021). Methods such as cooperative and problem-based learning reduce speaking anxiety and foster a supportive learning environment (Mohammed & Al-Hassan, 2023; Al-Shihri, 2019). The ICAP framework further demonstrates that deeper engagement enhances cognitive processing and retention (Fayombo, 2012). Despite challenges like institutional resistance and teacher training, the overwhelming benefits of active learning necessitate its adoption in EFL instruction (Prince, 2004; Cabrera-Solano et al., 2020). By transforming classroom dynamics, active learning equips students with essential communication skills for academic and professional success.

A. Summary of Key Findings

Active learning significantly improves engagement, performance, and speaking confidence in EFL students. Strategies like Think-Pair-Share, group discussions, and digital tools create dynamic, low-anxiety environments that enhance collaboration and critical thinking (Chi, 2014). Mobile applications and online platforms, such as Formative, further increase motivation and participation (Cabrera-Solano et al., 2020). Given these benefits, integrating active learning should be a priority for educators seeking to strengthen students' communication skills (Mohammed & Al-Hassan, 2023).

B. Implications for EFL Educators

To meet the evolving demands of EFL education, traditional methods must shift toward dynamic, student-centered approaches. Strategies such as problem-solving, role-playing, and digital language games enhance motivation, language proficiency, and self-directed learning (Silva, 2023; Al-Shihri, 2019). Addressing psychological factors like anxiety and confidence is crucial in creating supportive classrooms that encourage participation (Chi, 2014). By adopting



adaptable teaching methods that foster critical thinking and inclusivity, educators can enrich the EFL learning experience and support students' long-term academic success.

C. Future Directions for Research and Practice

Future research should examine the impact of active learning on diverse EFL learner populations, particularly in non-Western contexts. Investigating blended learning environments and their role in reducing speaking anxiety and improving oral proficiency should be a priority, especially at the university level. Additionally, studies should explore how active learning influences neuroplasticity, strengthening language retention and cognitive flexibility. Visual frameworks illustrating the phases of language learning can further guide educators toward evidence-based best practices that enhance engagement and acquisition.

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Global Englishes and Language Teaching: A Review of Implementing Global Englishes Learning Activities into the EFL Classroom

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Abstract

This article explores the implementation of Global Englishes (GE) in learning activities, emphasizing the rise of English as a global lingua franca and the needs for a shift in teaching approaches to reflect the evolving sociolinguistic landscape. Drawing from fields such as World Englishes, English as a Lingua Franca, and English as an International Language, the article discusses how the global dominance of English has prompted a rethinking of English Language Teaching (ELT) curricula. This shift has led to the development of various research frameworks. The article explored the role of GE activities in the classroom, highlighting how educators can use them to improve proficiency and raise awareness of global communication. The objectives of this article were to explore the implementation of Global Englishes learning activities in EFL classroom via key topics include: 1) defining Global Englishes and its relevance in contemporary language teaching; 2) providing an overview of GE learning activities and their implementation in the classroom; and 3) discussing the challenges of integrating GE into current teaching practices. The literature review involved selecting 10 articles (2021–2025), to ensure that the study is based on the most recent research and educational trends into current teaching practices to highlight obstacles that educators and learners face when adopting GE principles. The research emphasizes the importance of equipping teachers with knowledge of World Englishes to foster inclusive teaching practices, preparing students for effective communication in a globalized world.

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Keyword: Global Englishes learning activities, Implementing GE Activities, EFL Classroom

Introduction

The role of English as a global lingua franca is crucial in facilitating communication across diverse cultures and professional fields. Its dominance is particularly evident in business, science, technology, and entertainment, where proficiency in English often determines access to opportunities and resources (Jenkins, 2009). As English continues to evolve into a multifaceted global language, educational frameworks must adapt accordingly. Effective communication in a globalized world involves not only linguistic proficiency but also an understanding of cultural nuances. This shift highlights the necessity for teacher training programs to incorporate perspectives from World Englishes (WE) and English as a Lingua Franca (ELF) to raise awareness of linguistic diversity. This approach, known as Global Englishes Language Teaching (GELT), emphasizes teaching English in a way that reflects its diverse global usage, acknowledging the variety of English forms and accents across different cultural contexts. Research indicates that pre-service teacher candidates who engage with WE perspectives experience a significant shift in their teaching beliefs and practices, advocating for a more inclusive approach to English language education (Solmaz et al., 2020).

In an increasingly interconnected world, effective communication in English requires more than just linguistic proficiency; it also demands a deep understanding of the diverse forms of Global Englishes (GE), shaped by different cultural and contextual influences (Galloway & Rose, 2018; Jenkins, 2015). Integrating GE perspectives into English language teaching is essential for helping learners develop communication skills that align with today's multilingual and multicultural global landscape (Matsuda, 2019). To prepare students for global communication, it is essential to incorporate GE perspectives into teaching practices, equipping learners with the tools to navigate the diversity of English varieties they will encounter.

This article explores various approaches to integrating GE activities into English as a Foreign Language (EFL) classroom. Specifically, it examines instructional strategies such as video-based exposure, which uses multimedia resources to introduce students to different English accents and contexts, broadening their understanding of the language (Boonsuk et al., 2022). Additionally, listening and speaking practice activities plays a crucial role, allowing students to



apply their knowledge of different English varieties in practical scenarios (Miao et al., 2024). Another effective strategy is role-playing scenarios, where students use various English varieties in context, enhancing their adaptability and comprehension of language variation (Mourchid, 2024). These approaches not only strengthen language skills but also foster cultural awareness and openness toward different English varieties (Kirkpatrick, 2021; Rose & Galloway, 2019). By examining these strategies, this article provides a foundation for developing English language pedagogy that is responsive to the evolving global linguistic landscape.

Global Englishes

The concept of Global Englishes encapsulates the myriad forms and variations of the English language as it is used worldwide, shaped by diverse linguistic and cultural influences. As English transcends its traditional boundaries, it integrates local languages and cultural contexts, making it more than just a communication tool; it becomes a dynamic medium for expressing identity. This phenomenon underscores the necessity of redefining pedagogical approaches to reflect the realities of Global Englishes. As Kirkpatrick (2007) notes, "Global Englishes refer to the diverse forms of English used in different parts of the world, often influenced by local languages and cultures." Adopting this broader perspective has significant implications for educators, requiring curricula that embrace linguistic diversity and equip learners to navigate a multilingual global landscape.

Building on this foundation, Global Englishes Language Teaching (GELT) has emerged as a response to the growing prominence of English as the world's foremost lingua franca. This shift has led to a reconceptualization of English Language Teaching (ELT) to better reflect the current sociolinguistic realities of English use in international contexts. Scholars have explored various research paradigms to support this perspective (Galloway & Rose, 2015; Jenkins, 2006; Matsuda & Matsuda, 2012). Despite their different focal points, these interconnected fields share a common goal: "to showcase the diversity of English and to instigate a paradigm shift in ELT" (Galloway, 2017, p. 2). To supporting this paradigm shift through curriculum design and teacher training is essential (Canagarajah, 2013), as it promotes not only linguistic competence but also cultural awareness. The urgency of revisiting pedagogical strategies in light of Global Englishes is



further reinforced by Kirkpatrick (2017), who argues for a more inclusive and realistic approach to English language education.

Overview of Learning Activities in Global Englishes

In the context of Global Englishes, learning activities should reflect the sociolinguistic complexities that define English as a lingua franca across diverse settings. Recent research underscores the importance of fostering critical engagement with language, allowing learners to navigate both the power dynamics of English and its role in shaping identities within multilingual environments (Galloway et al., 2020). For instance, a study on Thai-English code-switching highlights how linguistic diversity serves not only as a means of communication but also as a tool for establishing group identity among academic peers (Correia et al., 2021).

To address these realities, pedagogical approaches must evolve. Research emphasizes the need for greater teacher awareness and training in World Englishes, promoting inclusive teaching practices that move beyond traditional native-speaker norms. By integrating diverse learning activities, educators can better prepare students to navigate an interconnected world. This perspective is reinforced by educational materials that advocate for curricula reflecting the diversity of English varieties.

Effective Global Englishes learning activities should not adhere strictly to native speaker norms. Instead, they should emphasize English as a global lingua franca, acknowledging its multifaceted use across cultures. For example, role-playing exercises that simulate intercultural communication scenarios can enhance learners' ability to engage with different English varieties effectively.

Challenges in Global Englishes Learning Activities

Integrating Global Englishes (GE) into pedagogy presents challenges due to differing perceptions among learners and educators. The need for a paradigm shift in English teaching highlights the importance of adapting to 21st-century sociolinguistic realities (Abrit et al., 2022). While technology, such as collocation consultation systems, helps mitigate some difficulties, diverse educational contexts and curricula complicate cross-cultural collaborations. Many educators require additional training to develop linguistic awareness and apply inclusive teaching



methods. Addressing these issues through professional development, technology, and curriculum adaptation is essential for effective GE learning.

At Buriram Rajabhat University, the Business English major integrates Communicative Language Teaching (CLT) and Task-Based Language Teaching (TBLT) to enhance real-world communication skills. Given the lack of authentic GE materials, this study designs activities to raise awareness of English varieties and assess their impact on language proficiency, attitudes, and workforce readiness. By bridging gaps in Thai ELT, this research contributes to curriculum innovation and improved teaching strategies.

Table 1Challenges in Global Englishes Learning Activities

Challenge	Percentage of Learners Affected	Sources		
Limited Access to Resources	45%	Global Education Monitoring Report, UNESCO, 2023		
Cultural Misunderstanding	30%	World Englishes Journal, 2023		
Lack of Qualified Instructors	28%	International Association of Teachers of English as a Foreign Language (IATEFL), 2023		
Insufficient Technological Integration	33%	British Council, 2023		
Inconsistent Curriculum Design	37%	TESOL Quarterly, 2023		

The table highlights key challenges in Global Englishes learning, including limited resources, cultural misunderstandings, a shortage of qualified instructors, insufficient technology use, and inconsistent curricula. Reports from UNESCO, the World Englishes Journal, IATEFL, the British Council, and TESOL Quarterly (2023) underscore the global impact of these issues, emphasizing the need for systemic improvements in English education to support linguistic and cultural diversity.



Research Objective

To review the previous studies on the integrating of Global Englishes (GE) learning activities in EFL classrooms.

Research Methodology

The literature review was conducted by selecting 10 articles published between 2021 and 2025, focusing on the integration of GE principles into classroom instruction.

Research Results

Based on the literature review, various Global Englishes activities implemented in EFL classrooms have been identified. The results, showing the different activities used in ELF classrooms, are summarized in Table 2 below.

Table 2

Summary of the literature reviews Global Englishes learning activities between 2021 – 2025

Researchers	Title	Focus Area	Learning Activities	
Boonsuk, Ambele, &	Developing Awareness of Global	Awareness of Global	Translanguaging	
McKinley (2021)	Englishes: Moving away from	Englishes in ELT	practices, cultural	
	'native standards' for Thai university		diversity, perspectives	
	ELT		on English varieties	
Rajprasit (2021)	'Do as WE Do': Teaching World	Teaching World	Listening journals, TED	
	Englishes in a general English	Englishes in general	Talks, critical thinking	
	course to Thai students	English courses	activities	
Boonsamritphol	Implementation of the World	Instructional model for	Research, digital	
(2022)	Englishes instructional model for	World Englishes	projects, creative	
	enabling Thai students' listening		assignments, media	
	comprehension toward varieties of	1	incorporation	
	English			
Sangpetch, Kewara,	Integrating global Englishes	Integration of Global	GE-oriented lesson	
& Prabjandee (2023)	activities in a regular English	Englishes in regular	plans, engagement	
	classroom	classrooms	enhancement	



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Researchers	Title	Focus Area	Learning Activities
Shibasaki (2023)	Teaching Global Englishes in the	Exposure to diverse	Reflective writing,
	Classroom	English accents	student surveys,
			interviews, listening and
			communication skills
Miao, Kang, &	Incorporating Global Englishes	Development of	Awareness-raising
Meng (2024)	varieties into EFL classrooms:	listening and	activities, listening and
	Development of listening	pronunciation skills	speaking practice
	comprehension and pronunciation		
Lin (2024)	Engaging with Global Englishes and	Use of movies in	Critical analysis,
	cultures through movies: A bottom-	teaching Global	intercultural awareness,
	up curricular initiative	Englishes	discussions on linguistic
			diversity
Boonsuk, Wasoh, &	Global Englishes Pedagogical	Pedagogical activities in	Student interaction,
Ambele (2024)	Activities for English-as-a-Foreign	EFL settings	multimedia exposure,
	Language Settings and Beyond:		cultural exchange,
	Understanding Thai Teachers'		critical thinking, film
	Practices		analysis, teacher
			awareness
Mourchid (2024)	Global Englishes in the classroom:	Creative activities for	Interactive workshops,
	Creative ideas for developing EFL	awareness of World	digital storytelling,
	learners' awareness of world	Englishes	media analysis
	Englishes in today's digital era		
Sirijanchuen., &	Effects of the Global Englishes-	Impact of Global	Listening
Tangkiengsirisin	informed instruction on Thai	Englishes instruction	comprehension, attitude
(2025)	university students' attitudes		assessment
	towards English language learning		

The literature review highlights studies from 2021 to 2025 on integrating Global Englishes into English language teaching, emphasizing classroom activities that reflect English as a lingua franca's sociolinguistic complexities. Recent research stresses the importance of engaging students critically with language, enabling them to navigate the power dynamics of English and its role in shaping identities in multilingual settings (Galloway et al., 2020). Pedagogical approaches



like exposure to diverse English accents, reflective writing, and interactive assignments enhance students' understanding of linguistic diversity and develop critical thinking, intercultural awareness, and communication skills. For instance, interactions with native and non-native speakers improve real-world communication (Boonsuk et al., 2022), and exposure to various English varieties boosts listening comprehension (Miao et al., 2024). Reflective writing assignments also raise students' awareness and communicative achievements (Shibasaki, 2023). The research emphasizes the need for teacher training in World Englishes to promote inclusive teaching practices, preparing students for effective communication in a globalized world.

Discussion and Conclusions

The exploration of Global Englishes (GE) underscores the need for a paradigm shift in education, as traditional methods fail to address linguistic diversity. Research highlights English as a versatile communication tool, with growing support for integrating GE into curricula to enhance linguistic competence and intercultural understanding (Galloway et al., 2020). This shift urges educators to adopt innovative methods, with ongoing research essential for refining teaching practices (Alsagoff et al., 2016). The movement to incorporate World Englishes is expanding, especially in diverse cultural contexts like South Asia (Ehret et al., 2014), improving students' attitudes toward non-standard dialects.

As English evolves into a global lingua franca, embracing linguistic diversity is crucial, particularly in regions where instruction traditionally follows native-speaker norms (da Costa et al., 2024). A comprehensive educational model should incorporate authentic materials, collaborative learning, and real-world applications. Future GE learning relies on adaptive, technology-driven, and student-centered approaches, preparing learners for cross-cultural communication (Jenkins, 2006; Canagarajah, 2007; Seidlhofer, 2011).

The researcher will integrate GE into English Language Teaching (ELT) through activities promoting translanguaging, cultural diversity, and English variety awareness. Instructional strategies include listening journals, TED Talks, critical thinking, research, digital projects, and creative assignments. Students will engage with diverse accents through reflective writing, surveys, interviews, and listening exercises. Movies support critical analysis and intercultural discussions, while multimedia, cultural exchange, and film analysis foster



engagement. Interactive workshops, digital storytelling, and media analysis enhance creativity. These strategies develop key language skills, equipping students for global communication.

Suggestions and Recommendations

The future studies in this field could focus on evaluating the effectiveness of these approaches in improving language proficiency and communication skills. Furthermore, research could explore the long-term impact of exposure to multiple varieties of English on students' fluency, confidence, and intercultural competence

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The Development of Music Teaching Model for Autism Spectrum Disorder Students at the Xing Yu School, Fuzhou City, Fujian Province, China

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Abstract

This study examines the current state of music education for high school students with Autism Spectrum Disorder (ASD) at Xing Yu School in Fuzhou, Fujian Province, China, to optimize the teaching model to enhance their educational experience. The research employs a qualitative approach, including interviews with key informants such as school leaders and experienced teachers and observations of students' participation in music classes. The findings reveal that while the current music education practices at Xing Yu School effectively improve the social, emotional, and cognitive skills of students with ASD, there is significant potential for further enhancement. The study suggests the implementation of stratified and structured teaching methods, which cater to students' diverse abilities, as well as the integration of visual aids and modern technology to create a more inclusive learning environment. Additionally, the research highlights the importance of a supportive infrastructure, including well-equipped classrooms and a collaborative approach among educators, to facilitate the effective delivery of music education. The study offers practical recommendations for refining music education strategies, contributing to the broader discourse on special education, and providing a valuable reference for educators and policymakers in similar contexts.

Keyword: Autism Spectrum Disorder, music education, special education, teaching model, inclusive learning



1. Introduction

In the early 20th century, Western music theory and percussion education were introduced into China, which had a significant impact (Fox, 2021). In recent years, "autism" has received increasing attention from the international medical, psychological, and educational communities (Waltz, 2023). As a non-verbal art form, music can transcend language, express emotions, boost confidence, and help overcome social isolation (Malchiodi, 2020). By integrating music activities into social adaptation training in an organized and planned manner, efforts are being made to explore the rehabilitative effects on autistic children (Ferro, 2021). The goal is to enhance their social skills, stabilize emotions, increase learning motivation, and enable them to grow up happily and confidently (Broderick, 2021).

Autism Spectrum Disorder (ASD) is a complex neurodevelopmental condition characterized by challenges in social interaction, communication, and the presence of restrictive and repetitive behaviors. Educational interventions for children with ASD have been a focal point of research, with recent emphasis on the potential of music education and music therapy as non-pharmacological interventions. These interventions are believed to positively impact the social skills, emotional expression, and language development of children with ASD.

Fuzhou Xing Yu School is the first public special education school in the national education system to enroll children with autism. Founded in July 2012, the school's philosophy is rooted in the realities of its students and focuses on their development. After ten years of exploration and practice in "full support education," the school has established an ecological autism school curriculum system that includes both microsystem and mesosystem approaches. Additionally, the school plays a key role as the Fuzhou Special Education Resource Center, promoting and advocating for integrated education. It conducts general training for teachers on integrated education and selects and trains teachers to provide in-class guidance in pilot schools.

The school has earned several honorary titles, including Fuzhou Quality Parent School, Fuzhou Civilized Campus, and Fuzhou Youth May 4th Medal Collective Model. In December 2022, it was recognized as a "Fujian Province Special Education Standardized School."

Therefore, it is significant to study the optimization of the music teaching model for high school students with autism at Xing Yu School in Fuzhou, Fujian Province, China. This research



not only helps meet the learning needs of students with autism and promotes their development but also advances and refines the field of special education.

1.2 Research Objective

Research Objective 2: To develop the music teaching model for autistic students in XingYu School in Fuzhou City, Fujian Province, China.

XingYu School in Fuzhou City has demonstrated diversity and innovation in its music teaching model. It adopts diversified teaching forms, attaches importance to students' individual differences, and cultivates their interests, aiming to promote students' all-around development through music education. The following is a detailed analysis of the school's music teaching model.

1.3 Significance of the Study

Building upon an in-depth investigation of the current state of music education for high school students with autism at Xing Yu School in Fuzhou, Fujian Province, China, this study aims to provide new insights and exemplars for academic research and educational practices in the field of special music education. Through a thorough examination of the music education practices at XingYu School, we aspire to offer more specific and micro-level case analyses, providing personalized and targeted improvement plans for the music education of high school students with autism at the school.

Based on the on-site research and evaluation of the current state of music education for high school students with autism at Xing Yu School, this study will provide specific recommendations and implementation plans for educational and teaching work at the school. It will offer more scientific and effective music education solutions and intervention strategies to enhance the educational and rehabilitative levels of high school students with autism. This will contribute beneficial references for the school and promote the in-depth development of music education work at the institution.

2. Methodology

The research utilized qualitative methods to study the current state of music education for autistic high school students at Xing Yu School in depth. The study involved key informants such as the principal and the head teacher of Class 3, Grade 7, who have extensive experience in special



education, along with five students from Class 3, Grade 7 at Xing Yu School. The research instruments included surveys based on existing literature, structured interviews with school staff and special education experts, and detailed observations of students' music learning styles, performance, and adaptability to the learning environment. Data collection followed a systematic process, beginning with a review of existing information and followed by interviews and observations of students and staff. Data analysis employed an inductive approach to identify the data's similarities, differences, and relationships, presenting the findings in a descriptive format. The reliability of interview data was ensured through the Index of Item-Objective Congruence (IOC), with thematic analysis applied to interview recordings to uncover common themes related to the impact of the teaching model.

3. Results

Based on the research into the current teaching situation of XingYu School in Fuzhou City, Fujian Province, China, develop the music teaching model for autistic students in XingYu School in Fuzhou City, Fujian Province, China. XingYu School in Fuzhou City has demonstrated diversity and innovation in its music teaching model. It adopts diversified teaching forms, attaches importance to students' individual differences and the cultivation of their interests, aiming to promote the all-round development of students through music education. The following is a detailed analysis of the school's music teaching model.

3.1 Hierarchical Teaching

Hierarchical teaching is a form of teaching organization based on relevant theories in pedagogy and psychology. It fully considers the individual differences among students, divides students into different levels through scientific and systematic methods, and meticulously designs teaching objectives, teaching contents, teaching methods and teaching evaluation mechanisms that are suitable for students at different levels according to their specific characteristics. It aims to accurately meet the learning needs of students at different levels, maximize the promotion of each student's individualized and comprehensive development on the basis of their original foundation, fully demonstrate the educational principle of teaching students in accordance with their aptitude, and conform to modern education's high attention and emphasis on individual development.



3.1.1 Analysis of Students' Learning Situation

In the music teaching context of XingYu School, when carrying out stratification for autistic students, a rigorous and multi-dimensional comprehensive evaluation index system has been constructed. This system covers the dimension of music perception ability, including the perceptual acuity of basic music elements such as pitch, timbre and rhythm; the dimension of music performance ability, involving whether students can use voice, musical instruments and other means to conduct accurate musical expressions, such as singing simple songs and playing basic rhythm patterns. According to students' ability levels and learning characteristics, different levels of teaching objectives and teaching contents are formulated, and hierarchical teaching is implemented. Taking the students in Class 3, Grade 8 of the class I teach as an example, the corresponding music subject evaluation forms for students are formulated as shown in the following table:

Evaluation content Name	ChenSshenlan	YangQianyu	LinXijing	ZhengXinyang	WeiHuacheng
Can listen to music attentively for a long time.	4	4	4	2	2
2. Can play simple percussion instruments (sand hammer, bell bell, triangle iron, small drum, etc.), with music.	3	3	2	2	1
3. Listen to the timbre of common instruments.	3	3	3	2	0
4. Be basically accurately and can sing basically accurately.	4	4	3	3	2
5. Can sing 2-3 songs independently each semester.	4	4	3	2	2
6. Be able to play music games together.	3	3	2	2	1
7. Be able to express your feelings about music with your body movements.	3	2	2	3	0

Evaluation Criteria: Cannot do at all (0 points); Can do with assistance (1 point); Can do with minimal prompts (2 points); Can basically do (3 points); Can do completely (4 points).



Based on the assessment results of the evaluation form, students in Group A possess relatively good language skills and movement imitation abilities. They can participate in music activities in class with a relatively high level of participation. Students in Group B have average language abilities and imitation abilities. Although they can also take part in classroom activities, they may occasionally experience a lack of concentration. Students in Group C have relatively few spontaneous utterances, occasionally experience significant emotional fluctuations, and have a lower level of participation in class. All three groups of students are relatively weak in their ability to play musical instruments, and it is quite challenging for them to play musical instruments in line with the melody of music.

Group A students: Chen Shenlan and Yang Qianyu have good language skills. They can sing basically accurately and are able to sing songs independently. They have a certain sense of rhythm. There is significant room for improvement in their ability to play musical instruments. They can actively participate in music classroom activities.

Group B students: Lin Xijing and Zheng Xinyang have a certain level of language ability. They can sing songs relatively completely. Their sense of rhythm needs to be strengthened through more practice. Their ability to play musical instruments is relatively weak. They can participate in music classroom activities, but their attention is rather easily distracted. Zheng Xinyang is prone to emotional problems.

Group C student: Wei Huachen has relatively distracted attention, has more behavioral problems, and has a low level of participation in class.

3.1.2 Learning Objectives

Based on the comprehensive and detailed assessment results, autistic students are scientifically divided into different levels. Generally, they are divided into the basic level: Group C students, the intermediate level: Group B students, and the advanced level: Group A students. For students at different levels, teaching objectives corresponding to their learning situations are formulated.

For basic-level autistic students, that is, Group C students. The teaching objectives focus on helping them establish the most fundamental music perception and cognition system. In terms of music perception, it emphasizes cultivating students' perception of simple pitch (such as distinguishing high and low notes); in music performance, guiding students to



conduct simple vocal exercises, imitate the teacher's singing or playing actions, and be able to follow simple music classroom instructions, such as "pick up the instrument" and "stop playing"; in the social interaction aspect, encouraging students, with one-on-one assistance from the teacher, to attempt simple eye contact with nearby classmates or jointly participate in extremely simple music interaction activities, such as passing musical instruments, to initially establish social awareness in music learning.

For intermediate-level students, that is, Group B students, the teaching objectives, while consolidating the existing music foundation, place more emphasis on the expansion and deepening of abilities. In the dimension of music perception, in terms of music perception, students are required not only to distinguish high and low notes but also to recognize basic rhythm patterns, such as common duple meter and triple meter rhythm patterns, and accurately distinguish distinct instrument timbres, such as the timbres of common instruments like the piano and the bass drum. In music performance, guiding students to conduct simple vocal exercises, imitate the teacher's singing or playing actions, and gradually be able to independently complete short, repetitive music fragments. In the cognitive domain, the objective is set to enable students to understand basic music concepts, such as notes and beats.

For advanced-level students, that is, Group A students, the teaching objectives focus on the in-depth improvement of music literacy and the cultivation of innovation ability. In addition to achieving the teaching objectives of Group B and Group C students, it is also necessary to guide students to attempt to perceive the emotions, artistic conceptions and cultural connotations contained in music works from the perspective of artistic aesthetics. In music social activities, it emphasizes cultivating students' ability to actively cooperate with peers to carry out small-scale music performance activities, such as jointly playing a simple piece of music, to improve their communication and cooperation abilities in the music context. In music performance, it is expected that students can sing moderately long songs completely and smoothly, play rhythm patterns with a certain degree of difficulty proficiently, and begin to attempt to use different musical expression techniques such as dynamics and tempo to enrich musical expression.

3.1.3 Key and Difficult Points of Teaching Content

The key and difficult points of teaching content refer to the crucial issues that must be addressed in this lesson. They are the contents in the teaching materials that, in order to



achieve the teaching objectives, students must be proficiently mastered. They are also the knowledge points and skills that are prone to difficulties and obstacles during the learning of this lesson, that is, the parts in the teaching materials that are not easy for students to understand and master, but which students must master.

According to the teaching objectives of students at different levels, the key and difficult points of teaching content corresponding to the learning situations of students at different levels are formulated. For basic-level autistic students, Group C students, the teaching content focuses on students' mastery of basic music knowledge and skills, such as how to accurately recognize simple pitch and rhythm, and observing whether students can participate in classroom music activities. Emotional and social performance is also an important evaluation content, considering whether students' emotions are stable during the music learning process and whether they are willing to conduct simple music interaction and communication activities with teachers and peers.

For intermediate-level autistic students, Group B students, the teaching content pays more attention to students' performance in various music teaching activities. For example, how to use songs with distinct rhythms accompanied by rhythmic movements such as clapping and stomping to help students understand and remember basic rhythm patterns. In terms of music performance, short, highly repetitive songs can be selected as the singing content first, starting from singing sentence by sentence and gradually transitioning to independent singing; in instrument playing, starting from simple percussion instruments (such as maracas and castanets), teaching students how to hold the instruments and perform simple rhythmic tapping. The cognitive teaching content revolves around common music symbols (such as the graphic representations of quarter notes and eighth notes).

For advanced-level students, Group A students, in addition to the mastery of basic music knowledge and skills and the performance in various music teaching activities, the key and difficult points of teaching content focus more on students' in-depth participation and innovative performance in music exploration, creation and performance activities. Let students conduct comparative analysis of pitch changes, rhythm characteristics and timbre combinations, such as the comparative appreciation of classical music and folk music. The teaching content of music performance covers the singing of longer and more melodious songs and requires students



to be able to sing accurately and independently. In instrument playing, teaching students how to play the combined rhythms of various percussion instruments such as bass drums and gongs, and be able to play in cooperation with partners, as well as attempting single-note playing on simple keyboard instruments (such as electronic keyboards), gradually building the perception and performance ability of music.

3.1.4 Conclusion

To sum up, hierarchical teaching has demonstrated outstanding adaptability and significant educational value in the fields of music teaching at XingYu School and special education for autistic children. Based on a rigorous theoretical foundation and a scientific practical system, it fully takes into account the individual differences of autistic students in multiple aspects such as music perception, performance, cognition and social interaction. Through meticulous student stratification, precise positioning of teaching objectives, appropriate arrangement of teaching contents, application of diverse teaching methods and implementation of comprehensive teaching evaluation, it builds an individualized music learning ladder for each autistic student. This teaching model can not only effectively enhance the pertinence and effectiveness of music teaching and help students move forward steadily on the path of cultivating music literacy but also plays a crucial role in promoting the all-round development of autistic students.

3.2 Structured Teaching

Structured teaching stems from an in-depth understanding of the learning characteristics and needs of autistic children. Its core theoretical bases include the cognitive-behavioral theory and the visual learning theory. The cognitive-behavioral theory emphasizes promoting learning and development by changing an individual's cognitive structure and behavior patterns. For autistic children, they have particularities in aspects such as information processing, attention and thinking modes. Structured teaching aims to help them establish an orderly cognitive framework so that they can better understand and handle learning tasks. The visual learning theory attaches importance to using the presentation of visual information to assist learning. Autistic children often have relatively strong perception and memory abilities for visual information. Structured teaching makes use of visual tools such as visual prompts, schedules and task arrangement tables to transform abstract music knowledge and teaching requirements into intuitive and perceptible forms, so as to enhance their learning effects.



3.2.1 Application of Structured Teaching in Music Classes

In music classes, teachers will apply the structured teaching method to systematically organize and arrange the teaching contents and processes, making teaching clearer and more orderly. For example, when teaching a song, elements such as lyrics, melody, and rhythm will be decomposed and taught step by step in a certain order to help students better understand and master music knowledge and skills.

In the teaching of music knowledge and skills, structured teaching breaks down complex learning contents into multiple small tasks with clear hierarchies and in a progressive manner. Taking learning a new song as an example, first comes the task of learning lyrics. Teachers present the lyrics to students in a form combining pictures and words. By reading the lyrics sentence by sentence, explaining the meanings of the lyrics, and guiding students to imitate pronunciation, teachers help students become familiar with and understand the content of the lyrics. For example, for some abstract lyric words, teachers can use pictures or real objects to demonstrate, allowing students to understand their meanings more intuitively. After students have mastered the lyrics, they move on to the task of learning the melody. Teachers hum the melody of the song first, letting students listen and feel the ups and downs of the melody and the characteristics of the rhythm. Then, the method of segmented teaching is adopted. The melody is divided into several measures, and students are taught to hum measure by measure. Meanwhile, gestures or metronomes are used to assist students in grasping the rhythm.

3.2.2 Application of Visual Support System in Music Teaching

Visual prompt cards and charts are commonly used visual support tools in music teaching at XingYu School. For example, in the teaching of music theory knowledge, teachers have made various note value cards. On these cards, the shapes, names, and corresponding duration examples of different notes are printed. For instance, on a quarter-note card, a solid note head with a stem is printed, and it is marked that the duration is one beat; on an eighth-note card, a solid note head with a stem and a flag is printed, and it is marked that the duration is half a beat. During the teaching process, teachers display these cards to let students intuitively recognize and compare the durations of different notes, helping them understand the concept and composition of rhythm. Similarly, in the teaching of song singing, teachers use song process prompt cards. On these cards, lyric fragments or icons are arranged in sequence according to the order of song



singing. For example, a microphone icon is used to represent the singing part, and a note icon is used to represent the instrument playing part. When singing, students can clearly know their current singing position and the following singing content according to the prompts on the cards, avoiding situations such as forgetting lyrics or getting the singing order confused.

3.2.3 Teaching Preparation

According to the teaching contents and requirements of each class, corresponding teaching aids should be prepared, such as electronic keyboards, multimedia courseware, visual prompt cards, and small percussion instruments.

3.2.4 Conclusion

Structured teaching provides music teachers at XingYu School with a set of systematic, scientific, and operable teaching models and methods, making the music teaching process more standardized and orderly. Teachers can, in accordance with the principles and requirements of structured teaching, carefully design the teaching environment in advance, arrange the schedule, decompose teaching tasks, and prepare corresponding visual support tools, so that teaching activities can proceed smoothly according to the predetermined plan. Meanwhile, each link and element of structured teaching has clear standards and norms, which facilitates teachers to conduct self-supervision and evaluation during the teaching process, enabling them to discover problems existing in teaching in a timely manner and make adjustments and improvements.

3.3 Orff Music Teaching

Autistic students often show characteristics such as difficulties in understanding abstract concepts, lack of concentration, and weak social interaction abilities during the learning process. The Orff music teaching method, with its intuitive, vivid, and experiential teaching approaches, adapts well to these learning characteristics of autistic students. Through various forms such as body movements, rhythm instrument playing, and music games, it transforms abstract music knowledge into concrete and perceptible physical experiences and operational activities, making it easier for autistic students to understand and accept the content of music learning. For example, body rhythm allows students to feel the rhythm through body movements, avoiding the difficulty of solely relying on auditory perception to understand rhythm; the simple operation and rich timbres of Orff instruments attract students' attention and stimulate their learning interests; music creation and improvisation activities provide students with a space for free expression, meet their



unique thinking modes and emotional needs, and help improve their learning enthusiasm and participation.

3.3.1Body Rhythm Teaching

In the music classes of XingYu School, body rhythm is one of the important means of rhythm training in the Orff music teaching method. Teachers guide autistic students to make sounds with different parts of their bodies to feel the rhythm, such as clapping hands, stomping feet, patting shoulders, snapping fingers, etc. For example, when teaching a simple duple meter rhythm (strong - weak), the teacher will demonstrate by clapping hands once to represent the strong beat and then stomping feet once to represent the weak beat, and let students follow and imitate. For students with weaker abilities, the teacher will slow down the pace and provide one-on-one guidance to help them accurately grasp the strong and weak patterns of the rhythm. As students' abilities improve, the complexity of the rhythm is gradually increased, such as changing the number and speed of clapping hands and stomping feet, or adding actions like patting shoulders and snapping fingers to form more diverse rhythm combinations. Through this hands-on rhythm experience method, autistic students can more intuitively feel the changes in rhythm, improving their sense of rhythm and body coordination. Meanwhile, body rhythm also has strong interactivity. Teachers can organize students to conduct group body rhythm practice, allowing students to feel the rhythm coordination with each other in the interaction and enhancing their social awareness and teamwork abilities.

3.3.2 Rhythm Instrument Playing

Orff instruments are widely used in rhythm training in the music teaching of XingYu School. These instruments are rich in variety, including percussion instruments such as wooden fish, castanets, maracas, and triangle, which have different timbres and are simple to operate, making them very suitable for autistic students to use. Teachers select appropriate rhythm instruments and assign them to students according to students' ability levels and characteristics, and design corresponding rhythm practice activities. For example, when learning a quadruple meter rhythm pattern (strong - weak - secondary strong - weak), let some students use wooden fish to strike the strong beat, some students use castanets to strike the weak beat, and some students use maracas to strike the secondary strong beat. Through the combined playing of different instruments, students can deeply understand the rhythmic characteristics of the quadruple meter



rhythm in the process of operating the instruments. During the instrument playing teaching process, teachers focus on guiding students to listen to the sounds produced by the instruments, feel the integration effect of different instrument timbres and rhythms, and cultivate students' music perception abilities and aesthetic abilities. Meanwhile, through instrument playing practice, it can also exercise students' fine motor skills of hands and hand-eye coordination abilities, which has a positive promoting effect on the physical function development of autistic students.

3.3.3 Conclusion

The application of the Orff music teaching method in the music teaching of XingYu School and special education for autistic students provides a beneficial reference for the innovation of music teaching models in special education. Traditional music teaching in special education often focuses on the instillation of music knowledge and the training of skills, and the teaching methods are relatively single, making it difficult to meet the special needs of autistic students. However, the Orff music teaching method, with its unique teaching concept and rich and diverse teaching forms, breaks the shackles of the traditional teaching model and injects new vitality into music teaching in special education. It emphasizes the dominant position of students, pays attention to students' personal participation and experience, and organically combines music learning with body movements, language expressions, social interactions, and other aspects, constructing a more comprehensive, integrated, and creative music teaching model in special education. This innovative teaching model can not only improve the music learning effect of autistic students but also promote their all-round development in multiple fields, providing new ideas and directions for the reform and development of music teaching in special education.

Summary

Regarding the first research objective, which focused on investigating the current state of music education and teaching at XingYu School in Fuzhou City, Fujian Province, the findings are as follows:

XingYu School in Fuzhou City, Fujian Province, has achieved significant success in the field of music education and teaching. The school boasts a team of professional music teachers with extensive teaching experience and expertise, enabling them to deliver high-quality music education to students. The school is well-equipped with advanced music teaching facilities, such



as electronic keyboard classrooms and chorus rooms, providing strong material support for effective music instruction.

Additionally, the school actively incorporates advanced teaching concepts and methods from both domestic and international sources to continuously enhance the quality of its teaching. Teachers guide students to participate in performances both within and outside the school, fostering a positive learning attitude and good study habits among students. This approach encourages students to continue practicing after class, leading to continuous improvement in their music literacy.

The school delivers high-quality music education by offering a wide range of music courses and interest groups, supported by rich teaching resources and a dedicated teaching staff. Furthermore, the school emphasizes the importance of home-school cooperation and community involvement in its educational approach. Looking ahead, the school plans to further deepen the reform of its music education and teaching practices, optimize the music teaching model, and continue providing exceptional music education services to a broader range of students.

4. Discussion

XingYu School in Fuzhou City has innovatively integrated three advanced teaching models, namely structured teaching, Orff music teaching method and hierarchical teaching, in music teaching and achieved remarkable teaching results. Structured teaching has provided an orderly framework for the environment, time and tasks in music teaching. The Orff music teaching method has stimulated students' music interests and creativity with its unique teaching forms. Hierarchical teaching has ensured the personalization and pertinence of teaching. These three teaching models cooperate with each other and complement one another, jointly promoting the all-round development of autistic students in multiple aspects such as music perception, performance, creation, social interaction and emotional expression.

The successful practice of this comprehensive teaching model has provided valuable experience and examples for the field of music teaching in special education. It shows that through the rational integration of multiple advanced teaching models, it is possible to effectively overcome the special difficulties of autistic students in the process of music learning, fully tap their music potential, and open a door for them to the palace of music art. In the future, it is hoped



that more special education institutions can draw lessons from the teaching experience of XingYu School in Fuzhou City, continuously explore and innovate music teaching models, and provide higher-quality and more effective music education services for autistic students and other students with special needs, helping them to achieve a better life accompanied by music.

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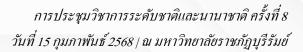
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A study on the personal experience and achievements of Xian Yuyuege

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Abstract

The purpose of this study is to study Professor Xianyu Yuege's personal experience and achievements. In this data collection, survey, interview and observation research tools were used. The research results are as follows:

Personal learning experience, Award-winning achievements, social status, Representative singing works, Theoretical achievements, Teaching achievement. Through interviews on these issues, the researchers obtained some valuable information. The biggest reason why Professor Xianyu Yuege has achieved these excellent results is her love and persistence for vocal art. She works very hard in the learning process and is good at summarizing. At the same time, she will browse some other knowledge to promote her professional learning. She is also good at communication and performs very well in artistic practice. In addition, she is smart and talented, and especially loves reading.

Professor Xianyu Yuege attaches great importance to the language problems of students in singing works in vocal teaching. Language is very important for vocal singers. Only by speaking the language correctly can they sing correctly and express their emotions. Whether Professor Xianyu Yuege is helping students with vocal practice or singing, he is always very patient and meticulous in handling students' problems.

Keyword: Xianyu Yuege, Vocal Singing, Representative Singing Works



Introduction

As an outstanding singer in the field of vocal singing, Professor Xianyu Yuege has made great contributions to the field of music education, achieved excellent results, and has been unanimously recognized and praised by professionals in the industry. (Li Baojie, 2004, p. 32)

Through the author's research with the help of research tools, it is known that Professor Xianyu Yuege not only has a solid theoretical foundation and profound cultural connotation, but also is meticulous in teaching. From her more than 20 years of teaching experience, her teaching methods are more worthy of in-depth research and promotion. Sound aesthetics is crucial for vocal singers. Language is the cornerstone of singing. The most important thing in the process of learning vocal music is to pay attention to language and solve the problems in language. When learning works, we should not be restrained and solidified by learning vocal singing skills, but solve the problems in singing on the basis of correctly reading the language, so as to express the content and emotions of the work. Whether helping students practice vocal music or singing, Professor Xianyu Yuege always handles students' problems very patiently and meticulously. In terms of sound aesthetics, it has greatly helped the author's vocal learning.

So the author has a strong interest in sound aesthetics. Through this study, I have a deeper understanding of Professor Xianyu Yuege's teaching achievements and vocal teaching methods. On the one hand, it provides a basic reference and basis for my future vocal teaching. On the other hand, it also provides valuable inspiration and help for other vocal educators and learners.

Objective

To study Professor Xianyu Yuege's personal experience and achievements

Research Methodology

This study was divided into three groups, namely, major key informatics people, vocal aesthetics expert and music art director. The specific information is as follows:

Key Informants

Key Information Person: Professor Xianyu Yuege , Vocal Aesthetics Expert: Zhou Ling and Music Art Director : Deng Xiaoli.



Research Instrument

The author mainly used surveys, interviews and observations to conduct this paper research.

Data Collection

The author collected research results on Professor Xianyu Yuege's vocal teaching based on existing literature, materials and books through investigation, and observed Professor Xianyu Yuege's class as an auditor. In addition, the author interviewed Professor Xianyu Yuege and his teachers and artistic directors to obtain in-depth and meaningful qualitative data.

Data Analysis

The data were obtained through observation and interviews, analyzed according to the research objectives, and the results were presented in the form of descriptive analysis.

Results

The research results on Professor Xianyu Yuege's personal experience and achievements are as follows:

Personal learning experience, Award-winning achievements, Social status, Representative singing works, Theoretical achievements, Teaching achievement.

Through interviews on these issues, the researchers obtained some valuable information, as follows:

Personal learning experience

The biggest reason why Professor Xianyu Yuege has achieved these excellent results is first of all her love and persistence for vocal art; secondly, she works very hard in the learning process, is good at summarizing, and organizes and understands the knowledge she has learned. At the same time, she will browse some knowledge in other aspects to promote her professional learning; thirdly, she is good at communication and does very well in artistic practice; fourthly, she has a certain learning foundation, is smart and talented, and she is very attentive in academic research and especially loves reading. (Zhou Ling, Personal Communication, October 6, 2024). In addition, the piano is particularly important for vocal learning, and its importance is reflected in the fact that a large part of musical quality is accumulated and established through piano learning. The most helpful thing to improve singing ability is to practice hard every day under the correct



guidance of a teacher, and it is effective practice. (Xianyu Yuege, Personal Communication, September 19, 2024). The biggest reason why Professor Xian Yu Yuege was able to achieve these achievements is her self-confidence, hard work, and seriousness and dedication to her profession. (Deng Xiaoli, Personal Communication, September 25, 2024). Therefore, in vocal learning, learners must learn to study and make persistent efforts, be good at thinking, and greatly mobilize the initiative of learning.

Figure 1
XianyYuyuege



Award-winning results

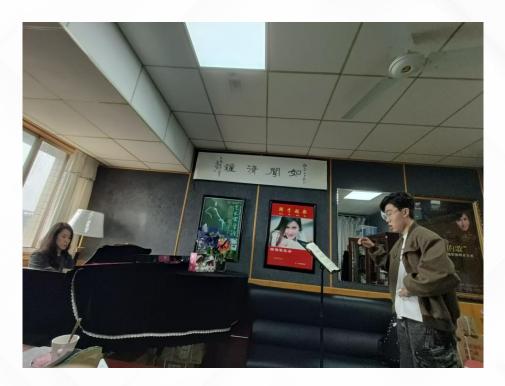
Professor Xian Yuyuege not only won the Golden Bell Award herself, but also produced students who won the Golden Bell Award. Behind the excellent results is always the unremitting practice of one's profession, the silent dedication to one's duties in one's position, in addition to strong psychological quality and strong self-confidence, the courage to and actively participate in professional competitions, constantly challenging oneself, enriching oneself, and improving oneself. In addition to winning awards in the field of professional singing, she has also won many awards in scientific research, such as the first prize of educational achievements issued by the



Shaanxi Provincial People's Government in 2018, the second prize of teaching achievements in 2015, and the third prize of Shaanxi Provincial Outstanding Achievements in Humanities and Social Sciences Research in 2009 and 2011.

Figure 2

XianyYuyuege Teaching



Social position

Professor Xian Yu Yuege is not only diligent and conscientious in teaching, and has trained many outstanding students; he brings a musical audio-visual feast to the audience on stage, and he also engages in social service activities, and has won high praise and social recognition from the literary and art circles. He serves as the vice chairman of the Shaanxi Musicians Association, the vice chairman of the Shaanxi Literary Volunteers Association, a member of the China Musicians Association and the China Literary Volunteers Association, and the vice president of the Shaanxi Cultural Exchange and Communication Association.



Figure 3Evening Performances



Singing representative works

Through interviews with research subjects and artistic directors, it was found that an excellent interpretation of a work is not simply to learn the melody and add lyrics to sing, but to carefully consider the emotions of each line of the lyrics, and to portray and interpret the characters in great detail, so as to finally convey the emotional connotation of the work to the audience. Professor Xianyu Yuege's representative works include her personal album "Remembering Chang'an", the premiere of two currently unpublished original vocal works "The Passionate Seagull" and "Overture to Life", and two original vocal works by her husband "Remembering Chang'an" and "Like a Dream" which were sung and published in her album "Remembering Chang'an". In addition, she also sang seven or eight operas such as Puccini's "Gianni Schicchi", Mozart's "The Magic Flute", "Cosi Fan Tuan", the original Chinese opera "White Deer Plain", etc., and played the leading role in all of them.



Figure 4

Personal Album



Theoretical achievements and teaching achievements

Professor Xian Yu Yuege has formed a teaching style with her own personal characteristics through years of study and teaching. She described her teaching experience in her doctoral thesis "A Study on Language Support by Bel Canto Singing Art", which is the highest theoretical achievement she has summarized in singing and teaching. In addition, her teaching achievements are also reflected in the fact that her students have won awards in competitions and have been constantly improving and growing.

Figure 5

Article





Discussion and Conclusion

Professor Xianyu Yuege attaches great importance to the language problems of students in singing works in vocal teaching. Language is very important for vocal singers. Only by speaking the language correctly can they sing correctly and express their emotions. Whether Professor Xianyu Yuege is helping students with vocal practice or singing, he is always very patient and meticulous in handling students' problems. She has a keen understanding and judgment.

The main instrument for vocal singing is the human vocal cord, the timbre is controlled only by human thoughts and feelings. This control mostly comes from subjective factors, so establishing correct ideology is a very important task in vocal singing skills training. As a vocal teacher, you must have a keen understanding and judgment so that you can detect the strengths and weaknesses of your students. find out the psychological activity methods that are easiest for students to master, so that they can master the correct singing method, and in the students' minds. It leaves a deep impression in the audi (Hu Ying, 2012, Unpage).

Her success story tells us that sticking to our choices and practicing persistently, not being impatient for quick success and persisting day after day, is the first step and key to success.

Suggestion

- 1. Those who wish to learn vocal music should read more books and deepen their cultural background in addition to professional studies.
 - 2. I hope my paper can bring substantial reference value to readers.

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A Study on the Current Situation and Problems of Popular Singing Teaching in LaiGe Music Training School in Xi'an, People's Republic of China.

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Abstract

This study aims to study the current situation and problems of popular song teaching at LAIGE Art School in Xi'an, People's Republic of China. This study is qualitative research. It adopts the methods of literature research and questionnaire interviews to systematically analyze the main problems existing in the current popular music teaching for adult groups. The results show that in the popular music teaching for adult groups, adult students will have insufficient study time due to busy work, and some music courses in schools have relatively fixed time, which leads to some students often taking leave, affecting the overall teaching progress and learning effect.

Keyword: Xi'an Lai Ge Music Training School, The Current Situation and Problems of Popular Singing Teaching, popular singing teaching, Adult Student Groups

Introduction

Xi'an Laige Music Training School was established in 2013. It has a total of 5 branches in Xi'an. It has a professional training team for popular singing, popular instruments, and arrangement and composition, including more than 30 vocal instructors, 10 instrument instructors, and three arrangement and composition instructors. There are more than 1,000 adult students. The



school has many excellent resident commercial performance bands and singers, providing students with rich practice opportunities and professional guidance. (Xi'an LaiGe Music Training School,2024. 2-4)

The "popularity" of pop songs also fully demonstrates that pop songs always keep up with the times. Whether from the economic, aesthetic, or cultural perspective, the sense of the times is always the most essential feature of pop songs. Only songs that fully reflect the most basic and typical characteristics of the times can be recognized and accepted by people. Luan Kai. (2011.pp.72-75).

The singing method of pop songs includes three significant elements: breathing, pronunciation, and articulation. Breathing can be divided into exhalation and inhalation, emphasizing exhalation. Singers need to control their breathing below the diaphragm during singing. To achieve breathing control, it is necessary to master effective training methods in daily life, such as slow and slow inhalation, fast and fast inhalation, etc. Therefore, in teaching pop song singing, professional teachers should adopt diversified and scientific teaching methods to cultivate students' singing abilities. Ma Xiaohong. (2020.p.133)

There are also some problems in adult music teaching. There is a shortage of resources specifically for adult music education, mainly reflected in the following two aspects: First, there are few teaching institutions. Although there are many music education institutions in my country, most are open to young people, and there are few training courses for adults. Adult music learning has its characteristics, and professional and popular adult music training courses should be opened according to their physical and mental characteristics. Second, there is a shortage of learning resources. First, my country's main body of music learning is young people, so teaching materials and learning resources are primarily developed for young people, and adults lack diversified self-study learning resources. Secondly, the learning resources on the Internet are mixed, and it is difficult for adults who lack the artistic foundation to distinguish and get practical help. If incorrect teaching materials are used, it may even interfere with music learning.

For example, in the field of adult piano learning, my country has a series of low crash courses that cannot play an auxiliary role in rigorous music learning. In the United States, introductory textbooks are specially written for adults, with relatively complete supporting resources and relatively complete audio-visual guidance, which can genuinely play the role of

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introductory education and make it easier for adults to learn independently. Finally, most of the resources for adult music education are scattered individual resources, and there is a lack of systematic information for learners to refer to. This creates an excellent obstacle for beginners. The information collection process is long and lacks a certain degree of discernment, which can easily lead to an incomplete knowledge system and even misunderstandings (Hong Ju Yin 2017, pp, 64-65)

Although the teaching of pop song singing has improved adult students' musical literacy, self-confidence, and teamwork ability and enriched their social lives, problems such as a single teaching model, noticeable differences among students, and insufficient teaching resources remain. It is necessary to enhance the teaching methods continuously, fully consider adult students' characteristics, stimulate learning motivation, and achieve development and breakthroughs in teaching pop songs at Lai Ge Music School.

Research objectives

To study the current situation and problems of popular song teaching at LAIGE Art School in Xi'an, People's Republic of China.

Research methods

The researchers developed a research instrument for the study of "Popular Concert Teaching at the Xi'an Leger Music School in China"

Key Informant

Through one-on-one online and offline interviews, we conducted three music singing experts, a principal of LaiGe Music School, three teachers of LaiGe Music School, and four adult students of LaiGe Music Training School.

Research tool

For the study on "The current situation and problems of popular singing teaching in Xi'an LaiGe Music Training School," the researcher prepared the research instruments, reviewed the relevant research literature, and instructed the teachers to conduct examinations, including surveys, interviews, and observations.



Data collection

Researchers have designed data collection procedures for this study. The order of these steps is as follows

- Coordination process for conducting research
- Basic data collection process
- Field Data Collection Procedure
- Obtaining the basic data for the study

Data analysis

According to the purpose of this study, the relevant data are summarized, and the results are described.

Results

According to the purpose of the study, the results are as follows:

Figure 1

Vocal rehearsal room for students at the LaiGe Music Training School If any student finds a problem, they will discuss and solve it in the classroom.



Teaching resources

At present, Xi'an Laige Music Training School has a professional pop singing, pop instrument, arrangement, and composition training team and a large number of excellent resident



commercial bands and singers. These can provide students with professional guidance and practice opportunities so that they can be exposed to practical experience and skills in the industry. However, there are also some shortcomings, such as the lack of individuality in the teaching method of pop songs and the lack of flexibility in teaching time.

The school's emphasis on adult students

The school fully considers the busy pace of life of adult students. In addition to regular weekend and evening offline courses, the school further expands the online live interactive course time to cover fragmented time such as early morning and lunch breaks. At the same time, students can make reservations for courses in advance and flexibly adjust class times according to their circumstances to ensure uninterrupted learning. If students miss classes due to exceptional circumstances, a certain number of free make-up classes or online self-study material packages can be provided.

Course arrangement

The course content includes music theory foundation, vocal exercises, breathing control, resonance training, visual singing, and auditory training.

Figure 2

In a music classroom in Xi'an Lage, the teacher is teaching adult students to practice breath.





School pop song teaching form

1. One-to-one teaching

Students and teachers provide one-on-one tutoring to teach the basics of pop songs and vocalization methods

2. Student Group Course Activities

Three students are invited every Friday to explain music theory and vocal skills together. In each group class, the teacher will assign a song for each student to learn to sing. The song will be practiced and coordinated between the various parts according to the student's timbre and range.

3. Actual performance

Organize students to participate in singing competitions held by the country, summarize some problems encountered in singing competitions, and students will represent the school to participate in commercial performances.

Figure 3

In June 2024, Xi'an LaiGe Music Training School and Zhejiang Satellite TV jointly held the Xi'an Division of the "I Want to Release a Record" competition. Principal Li Wanxin served as the chief director of the Xi'an Division.





Discussion and Conclusion

There are problems in popular singing teaching, such as a single teaching method and students' lack of freedom in class time. (Qiu Changjie 2020.98-101) In popular singing teaching, skill training is essential to master different musical styles. It is necessary to improve basic vocal skills, cultivate emotional expression and color adjustment ability, and shape personalized style to improve singing ability comprehensively. In this process, learn and master scientific vocal skills, range expansion, breath resonance, and other elements. Then, combine specific songs and examples of different musical styles to improve singing skills and expressiveness. First, understand the artistic characteristics of various musical styles; second, pay attention to the interaction between skill training and musical style. Different musical styles have different requirements for skill training, and the results of skill training will affect the presentation of musical style. Therefore, learners need to explore how to integrate the elements of musical style into skill training so that the training is closer to actual performance, thus forming a distinctive personal style.

In addition, attention should be paid to the effectiveness and sustainability of skill training, and it is necessary to study how to formulate a scientific and reasonable training plan so that the training results can play a lasting role.(Li Zezheng, 2024, 86-89)Therefore, in popular singing teaching activities, teachers should grasp the students' preferences, deeply analyze the students' psychology, combine the content of vocal teaching, select appropriate popular songs, and integrate knowledge points into popular songs. Organize students to sing popular songs, listen carefully, find problems and deficiencies, emphasize essential knowledge points, and achieve the ultimate teaching purpose. Using popular songs for vocal teaching can improve students' interest in vocal learning and participation in classroom activities and stimulate their enthusiasm for learning (Ma Changwei. 2014.17).

In summary, popular singing teaching is integral to music education under the new curriculum standards. Through popular singing teaching, we can learn a lot of knowledge, such as singing vocal skills, basic music theory knowledge, appreciation, singing emotions, and other abilities. In popular singing training, teachers guide students in learning popular music and use various teaching methods to enable students to sing popular songs. This is a great experience, and

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the value of popular singing teaching is also reflected, illuminating the way for people who pursue their musical dreams.

Suggestions

- 1. Improve school teachers' ability: Improve teachers' personal music theory knowledge and rich singing and teaching experience, and guide students to learn better music knowledge. It is also necessary to regularly organize teachers to participate in teaching seminars and training activities, share teaching experience and insights, explore new teaching methods and concepts, and improve teaching quality
- 2. Emphasis on social practice opportunities: The school organizes on-campus performances, report performances, and other activities for students, allowing them to show themselves on stage and enhance their self-confidence and performance. At the same time, it actively cooperates with off-campus performance organizations to strive for more commercial performances, charity performances, and other practical opportunities for students so that students can exercise and grow in real performance scenes and accumulate stage experience.

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A Study on the Improving of Choral Singing Ability for Secondary School Students at Xi'an Tieyi Middle School People's Republic of China

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Abstract:

This study addresses the growing importance of choral teaching in Chinese secondary schools and the challenges faced in enhancing students' choral abilities. The research objectives are to analyze the current state and challenges of choral teaching in the first grade at Xi'an Tieyi Middle School. The research methods include one-on-one interviews with music teachers, first-grade students, and university students majoring in music education. Research tools were prepared, including consulting relevant literature and developing structured interview guidelines. Data collection methods encompassed surveys, interviews, and direct classroom observations.

Through the study, Key findings indicate that choral teaching significantly improves students' musical literacy, team spirit, and aesthetic abilities. Effective teaching strategies and a strong theoretical foundation are crucial for enhancing choral performance. The study emphasizes a holistic approach to choral education, integrating technical skills with emotional and social development.

Keyword: Choral teaching, Secondary School Education, Teaching Methods, Music Literacy



Introduction

Located in the historic city of Xi'an, Xi'an Tieyi Middle School, located in historic Xi'an, is a prestigious secondary school with a strong emphasis on music education. Established in 1954, the school has over 3,000 students and 280 faculty members. It features advanced facilities, including two music classrooms, a choral rehearsal hall, and three professional music teachers. The school choir is renowned for its achievements in competitions. (Xi'an Tieyi Middle School Charter, 2024.2-3)

Despite these successes, challenges remain in choral education. Students often struggle with technical aspects like breath control and voice blending, and the limited vocal training and repertoire diversity hinder the choir's development. These issues highlight the need for refined teaching methods and curriculum adjustments. (Zhou Minxia. (2017). 113.)

Choral teaching is crucial in secondary school music education, developing students' vocal skills, teamwork, and aesthetic appreciation. However, with limited class time and varying student abilities, teachers face challenges in delivering effective training. Innovative strategies, personalized guidance, and enhanced extracurricular activities are essential to address these issues. (Liu Wei. 2024, 162-164.)

In summary, while Xi'an Tieyi Middle School's choir program is successful, it requires continuous improvement. This study aims to enhance choral teaching practices by analyzing the current state, identifying challenges, and proposing practical solutions, promoting students' holistic development through music.

Research objectives

To Analyze the current state and challenges of choral teaching in the first grade at Xi'an Tieyi Middle School.

Research methods

The study employs a qualitative research approach, focusing on thematic analysis to categorize and interpret data. The research design includes a clear outline of the research process, defining the population, sample size, and research instruments. The study aims to analyze the



current state and challenges of choral teaching at Xi'an Tieyi Middle School, with a focus on improving teaching methods and student outcomes.

Key Informant:

This study involved seven experts from various institutions, including professors from Xi'an Conservatory of Music with expertise in piano and vocal education, teachers from Xi'an Tieyi Middle School with rich experience in music education and instrumental performance, and music teachers from the junior high division of Xi'an Tieyi Middle School focusing on primary and secondary music education. Additionally, a graduate student specializing in vocal performance participated in the study. These experts, along with interviews conducted with junior high students from Xi'an Tieyi Middle School and undergraduate students from Xi'an Conservatory of Music, provided a comprehensive perspective on the current state and challenges in choral education.

Research Tool:

For the study on "Improving Choral Singing Ability at Xi'an Tieyi High School," the researchers prepared research tools, consulted relevant literature, and developed structured interview guidelines. Data collection methods included surveys, interviews, and direct classroom observations.

Data Collection:

Researchers designed the following data collection procedures for the study:

Coordination process for conducting interviews and observations.

Basic data collection on the current state of choral teaching and its challenges

Field data collection through in-class observations and interviews with participants.

Compilation of relevant documentation and teaching materials.

Data Analysis

In alignment with the study's objectives,we employed qualitative research methods, specifically thematic analysis, to categorize and analyze the data. This approach allowed us to summarize and interpret the results, identifying key themes and strategies for enhancing choral teaching practices.



Results

According to the purpose of the study, the results are as follows:

Figure 1

Xi'an Tieyi High School



1. Current State and Challenges of Choral Teaching at Xi'an Tieyi Middle School

Historical Context and Current Status: Xi'an Tieyi Middle School, established in 1929, is a leading educational institution in Shaanxi Province, recognized for its academic and extracurricular achievements. The school has a strong foundation in choral education, with a history of producing high-quality performances and fostering a culture of musical excellence. However, despite these achievements, the school faces several challenges in maintaining and enhancing its choral program.

Technical Challenges: Students often struggle with technical aspects such as breath control, voice blending, and intonation. For example, sopranos sometimes adopt a shouting tone, which compromises the harmony and aesthetic quality of the overall performance. This issue is further compounded by the limited systematic training in vocal techniques and a narrow repertoire, which restricts the choir's ability to perform more complex musical pieces.

Curriculum and Resource Limitations: The choral program at Xi'an Tieyi Middle School, while robust, faces challenges related to curriculum design and resource allocation. The need for a more diverse and comprehensive curriculum that integrates both traditional and contemporary musical styles is evident. Additionally, the school requires more resources to support advanced training and performance opportunities.



Figure 2

The students are rehearing for a chorus.



2.Impact of Teaching Methods on Students' Choral Abilities

Innovative Teaching Methods: Research has shown that innovative teaching strategies can significantly enhance students' choral abilities. For instance, the application of comprehensive art education concepts and technical means can improve students' music literacy and choral performance. In skill enhancement experiments, students' average scores increased from 60 to 75 points after receiving innovative teaching.

Team Collaboration and Engagement: The team collaboration ability assessment showed that students' team collaboration ability scores increased from an average of 5.5 points before the activity to 7.5 points after the activity. Additionally, student engagement surveys indicated that the average score of student engagement increased from 3 points to 4 points after changing the teaching methods.

Cultural Diversity and Acceptance: The final cultural diversity acceptance test revealed that students had the highest average liking rating for five different cultural music genres, showing an open attitude towards multiculturalism. This indicates that innovative teaching methods can effectively improve students' music skills, teamwork ability, participation, and acceptance of cultural diversity.

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Figure 3

Xi'an Tieyi Middle School participates in the New Year's concert.



Strategies for Improving Choral Teaching Practices

Holistic Approach: A comprehensive approach that integrates technical skills with emotional and social development is essential. This includes providing personalized guidance to students, enhancing extracurricular activities such as public performances and competitions, and integrating technology in teaching.

Curriculum Optimization: Optimizing the teaching content of choral conducting courses for music majors, arranging class hours and teaching progress reasonably, and dividing the choral conductor education into three stages can enhance students' practical abilities.

Practical Activities: Adding practical activities for music majors, such as organizing on-campus choral competitions and involving students in the rehearsal of other choirs, can improve their organizational and coordination skills.

Discussion and Conclusion

The study of choral teaching practices at Xi'an Tieyi Middle School has revealed a rich historical context and current status marked by academic and extracurricular achievements. However, despite its strong foundation in choral education, the school faces technical challenges related to breath control, voice blending, and intonation, as well as curriculum and resource limitations. The application of innovative teaching methods has shown promising results,



significantly enhancing students' choral abilities, team collaboration, engagement, and acceptance of cultural diversity. These findings underscore the importance of a holistic approach that integrates technical skills with emotional and social development. In conclusion, while Xi'an Tieyi Middle School maintains a strong choral tradition, there is room for improvement through curriculum optimization and the incorporation of more practical activities to further develop students' skills and appreciation of music.

Suggestions

1. Curriculum Development and Resource Allocation: The school should prioritize the development of a more diverse and comprehensive curriculum that integrates both traditional and contemporary musical styles. Additionally, more resources should be allocated to support advanced training and performance opportunities for the choir.

2.Continued Adoption of Innovative Teaching Methods: The success of innovative teaching strategies in improving students' choral abilities and overall engagement suggests that these methods should be continued and potentially expanded. This could include incorporating more technology in teaching and providing personalized guidance to students.

3.Promotion of Team Collaboration and Extracurricular Activities: Enhancing extracurricular activities such as public performances, competitions, and on-campus choral competitions can further develop students' team collaboration and organizational skills. These activities should be encouraged and supported by the school.

4.Fostering Cultural Diversity and Acceptance: Given the positive results of the cultural diversity acceptance test, the school should continue to promote an open attitude towards multiculturalism through its choral program. This could involve incorporating a wider range of cultural music genres into the choir's repertoire.

By implementing these suggestions, Xi'an Tieyi Middle School can further strengthen its choral program, providing students with a more comprehensive and engaging musical education.

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A Study of the Practice of Singing Guidelines the Opera Puccini's E lucevan le stelle

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Abstract

The purpose of this study is to examine the singing techniques of the Opera Puccini's E lucevan le stelle. In this data collection, there are research tools such as interviews and literature review, Interviews collect detailed qualitative data through face-to-face or remote communication with research subjects, while literature reviews gather and analyse secondary data by examining existing literature, archives, or datasets.and the results are as follows:

To perform "E lucevan le stelle" from Puccini's Tosca effectively, students should focus on emotional expression, breath control, and tonal variation. Connecting personal emotions with the lyrics enhances the performance's authenticity. Learning to use stage space and the camera helps build an emotional connection with the audience. Understanding Puccini's style and structure deepens artistic expression. Finally, teamwork and communication skills are vital for both performances and future collaborations. These strategies improve performance quality and stage confidence.

Keyword: Tosca, Compositional Style, Vocal Techniques

Introduction

From a physiological perspective, mastering bel canto requires singers to coordinate various vocal organs. Achieving a high level of bel canto singing demands advanced vocal



technique. Specifically, singers need to manage the nasal cavity, palate, oral cavity, and pharynx to control the sound source, while regulating the trachea, lungs, diaphragm, and chest cavity to manage the vocal power. Understanding the relationships among these vocal organs is fundamental to perfectly interpreting vocal works (Chen Qingqing, 2024, pp.118-125).

Delving into Character Emotion to Convey Genuine Feelings In vocal performances, delving into the character's inner world to convey genuine emotions is a vital aspect of bel canto singing. Singers must not only understand the lyrics but also deeply grasp the character's emotional world, connecting their own feelings with the character's experiences to authentically express the emotions in the song. To achieve this, singers should thoroughly study the song's background, cultural context, character's life experiences, and psychological state. This deep research allows performers to better understand the emotional motivations and psychological changes of the character, resulting in a more authentic and profound expression of the song's emotions (Tang Tian, 2024, pp.164-167).

Opera and Puccini's Realistic Works, Opera, combining vocal, instrumental, literary, and dramatic elements, is a significant art form in the Western tradition. Puccini's works are largely realistic, often reflecting social issues of the time. His opera "Tosca" integrates French literary and historical elements with Italian musical style. It depicts the love, hatred, and the dark class struggles of the era, making it a masterpiece that resonates on the global stage. This opera represents Puccini's profound reflection on literature, history, and humanity.

Research objectives

- 1. To analyze and study the singing technique of the Opera Puccini'E Lucevan le stelle.
- 2. To evaluate and develop the practice guidelines for singing the Opera, Puccini'E Lucevan le Stelle.

Research methods

Qualitative Research: This study on the singing techniques of the Opera Puccini's E lucevan le stelle. by E lucevan le stelle uses qualitative research methods, presenting the results through descriptive analysis. The research objectives are as follows.



Key Informant: One-by-one interviews with 4 experts Ren Jing ci, Yuan Yao, Wang Yang and Wang Kai and 5 Students Li Xiaohao, Zhao Wentao, Ye Jinshuo, Li Jianan and Ma Zelong.

Research tools

Instruments used in the study of "A study of singing techniques of the Opera Puccini's E lucevan le stelle", the researcher has prepared a research tool. By reviewing documents from relevant research, then ask the advisor to check the accuracy and suitability, including.

There are 3 questions for interviews:

Interviewing Experts: Ren Jing ci, Yuan Yao, Wang Yang, Wang Kai

- 1. How to express emotions while singing?
- 2. How to make the body movements more natural while singing?
- 3. How to perform Italian works more perfectly.

Data Collection

Researchers have designed data collection procedures for this study. The order of these steps is as follows:

The basic data collection process

- 1. Study basic information about singing teaching for singing major students from books, articles, journals, and related textbooks from various sources as a basis for the research.
- 2. Search for relevant information, such as the status of Singing teaching, the condition of singing teaching for singing major students in Hebei, People's Republic of China, etc.
- 3. Study subjects were selected based on the study objectives. Choose 4 singers and five singing major students of People's Republic of China .Data were collected and interviews were conducted with them .

Data Analysis

Study of "A Study of the Practice of Singing Guidelines the Opera Puccini's E Lucevan Le Stelle", the researcher has studied information from relevant documents and research. Data was obtained from observations and interviews. were analyzed and discussed. according to the purpose of the research Then present the summarized data and discuss the results in a descriptive analysis. The researcher has analyzed and presented the data according to the following goals.



Results

According to the purpose of the study, the results are as follows:

1. To analyze and study the singing technique of the Opera Puccini'E Lucevan le stelle.

"E lucevan le stelle" is a classic tenor aria from Puccini's Tosca, showcasing the character's emotional transformation. The opera, adapted from Victorien Sardou's play, reflects the realism movement and tells a story of love that blooms amidst adversity. Its profound artistic value has made it widely popular. Research on the aria covers an overview of the piece, its compositional style, and vocal techniques, aiming to deepen the understanding of Puccini's operatic features and provide theoretical support for performance interpretation.



Example 1 shows the melody rising while the accompaniment stays steady, creating a calm yet building emotional tension. E lucevan le stelle has a clear emotional arc, with restrained sections leading to an eventual emotional climax.





Example 2 shows a recitative with a rhythm shift from 3/4 to 4/4 and a brief modulation to D minor. This builds on the aria's emotional foundation, intensifying the overall emotional tension.



Example 3, in B minor, creates a dark atmosphere. The melody's large scales reflect inner turmoil, while expressive markings and meter changes heighten the dramatic tension, with rhythmic steadiness emphasizing the conflict.



Example 4 shows a return to stable rhythm after an outburst, with an accent quickening the pace before slowing down, symbolizing a tragic descent into death.

- 2. To evaluate and develop the practice guidelines for singing the Opera, Puccini'E Lucevan le Stelle.
- 2.1 Ren Jingci: In conclusion, performing "E lucevan le stelle" is a complex artistic challenge, demanding mastery of pronunciation, breath control, emotional expression, and acting. The singer must blend technical precision with emotional depth to convey the aria's tragic beauty and leave a lasting impact on the audience.
- 2.3 Wang Kai: In summary, performing "E lucevan le stelle" requires technical skill and deep emotional connection. The singer must navigate its rhythm, form, and range while



embodying the protagonist's emotional journey. By blending vocal technique with emotional storytelling, the singer brings the aria to life, evoking empathy and highlighting the profound tragedy and beauty of Puccini's work.

- 2.4 Wang Yang: "E lucevan le stelle" is a demanding and emotional aria in Tosca. Its success relies on the singer's deep understanding of Cavaradossi's emotions, expressed through body language, facial expressions, and vocal nuances. The stage design, lighting, and props must also enhance the tragic atmosphere, immersing the audience in the aria's emotional depth.
- 2.5 Yuan Yao: In conclusion, singing "E lucevan le stelle" is a complex challenge requiring flawless vocal technique and precise emotional expression through controlled breath. Proper breath control helps maintain vocal quality while conveying the character's emotional depth and the performance's artistry.

Figure 1

4 Experts: Ren Jing ci, Wang Kai, Wang Yang and Yuan Yao.



Discussion and Conclusion

Emotional expression involves vocalization, breath control, and emotional delivery, with teachers emphasizing lyric analysis, role-playing, and emotional integration. Stage performance includes singing, body language, and interaction, requiring thorough preparation to engage the audience. Comprehensive skills, music history, and theory are key to musical success.



Just like pronunciation and articulation must be clear, Zhao Yuanzheng suggests that from the very beginning of training, it is essential to comprehensively understand aspects such as breath support, diction, articulation, and resonance cavities. Over time, one should realize that these elements are interdependent, interconnected, and inseparable as a whole. In singing, the goal is to find a holistic sense rather than focusing on isolated parts. (Zhao Yuanzheng, 2016, pp.023).

Suggestions

- 1. The research results can be used as a guideline for basic to advanced singing training in the differences singing styles.
 - 2. The research results can be applied to practicing singing in other forms.
 - 3. The research results can be used as guidelines for teaching and learning about singing.

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A study of piano techniques of the Goyescas Suite: 1. Los Requiebros Granados

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Abstract

This study explores the piano techniques utilized in Granados' Goyescas Suite, specifically focusing on the first piece, "Los Requiebros." Employing a combination of interviews and literature reviews as research methods, data is collected to provide a comprehensive understanding of performance practices. Interviews yield detailed qualitative insights through direct or virtual engagement with performers, while literature reviews analyze existing sources, archives, and datasets for secondary data.

Findings indicate that key components of interpreting "Los Requiebros" include emotional expression, timbre control, and rhythmic precision. Successful performances require not only technical skill but also a profound comprehension of the piece's emotional essence, which must be communicated to the audience through nuanced tonal variations and meticulous rhythmic execution. Effective timbre control demands versatile finger techniques and wrist movements to achieve a soft and pure sound quality. Furthermore, the inherent rhythmic fluidity of the piece calls for performers to convey its internal rhythm while ensuring accurate execution. Through dedicated practice, reflective learning, and constructive feedback, musicians can deepen their emotional expression and refine their technical prowess, culminating in an artistic interpretation that harmoniously integrates music and emotion.

Keywords: Piano techniques, Goyescas Suite: 1. Los Requiebros, Granados



Introduction

The piano, known as the "king of instruments," boasts a wide range, resonant tone, and versatility. It plays a crucial role in nearly all musical styles and forms, covering a vast array of genres. The evolution of keyboard instruments over the past two thousand years, from their origins to the modern piano, reflects the accumulation of human wisdom. This development represents a significant milestone in the history of art and music, embodying progress in history, culture, and economics. This article provides a detailed overview of the evolution of keyboard instruments, including their design and mechanical principles across different periods, and the close relationship between composers and the development of keyboard instruments. (Sui Xin, 2021, 67-70).

After the Spanish-American War in the late 19th century, Spain faced a bleak national fate. Spain was no longer the powerful nation it once was, and patriotic sentiment surged as people sought to reclaim a sense of Spanish identity. The arts needed a significant figure, especially one who deeply explored the essence of Spain. Francisco Goya was such an artist. Goya, one of the greatest Romantic painters of the late century, revered Velázquez, Rembrandt, and nature as his teachers. His art was deeply rooted in Spanish soil and played a pioneering role in European Romantic painting. Works like "The Naked Maja" and "The Clothed Maja" brought Goya international acclaim. In 1898, Granados first saw Goya's works at the Prado Museum in Madrid. The impact of Goya's art left a profound impression on Granados, quickly sparking his musical creativity. Granados increasingly focused on Goya's life and art, finding a resonance between Goya's depiction of daily Spanish life and Granados's desire to capture the "true spirit" of Spain through Spanish folk songs and popular music. Inspired by Goya's paintings, Granados began to conceive the piano suite "Goyescas." (Liu Sanhui, 2013, 136-137).

The next section of this article will analyze the first piece from Granados's suite "Goyescas," titled "Los Majos Enamorados" ("The Lovesick Majos"). Granados, one of the most renowned Spanish composers of the Romantic period and a foundational figure in Spanish



nationalist music, is celebrated as the "Spanish Chopin." His works reflect the Romantic style of Chopin and Schumann, infused with a strong Spanish musical identity and thoughtful reflections on his era. The suite "Goyescas" is a notable example of Granados blending the art of Spanish painter Goya with his musical creativity. The first piece, "Los Majos Enamorados," depicts a lively and vibrant scene of a Spanish girl from the lower classes dancing and expressing her affection to her beloved, capturing a sense of passion and vitality.

Research objectives:

To study the piano techniques of the Goyescas Suite: 1. Los Requiebros Granados

Research methods

Qualitative Research: This study on the piano techniques of the Goyescas Suite: 1. Los Requiebros by Granados uses qualitative research methods, presenting the results through descriptive analysis. The research objectives are as follows.

Key Informant: One-on-one interviews with 2 experts ,5 piano teachers and 5 Students **Expert**

- 1) Li Songkun: Associate professor, doctor of Arts, graduated from Odessa National A.
- V. Nezhdanova Academy of Music in Ukraine. He is currently a lecturer in the Piano Department of the School of Music at Guangxi Arts University.
- 2) Wu Lingcao: Associate professor, doctor of Arts, graduated from Odessa National A.
- V. Nezhdanova Academy of Music in Ukraine. He is currently a lecturer in the Piano Department of the School of Music at Guangxi Arts University.

Piano teachers

 Pang Lulu: 5 years of piano teaching experience, graduated from Nanning Normal University, and currently a full-time piano teacher at Chongzuo Preschool Teacher Training College.



- 2) Chen Shuguang: 9 years of piano teaching experience, graduated from Shanxi University, and currently a full-time piano teacher at Chongzuo Preschool Teacher Training College.
- 3) Xia Lu: 8 years of piano teaching experience, graduated from Shanxi University, and currently a full-time piano teacher at Chongzuo Preschool Teacher Training College.

Students

- 1) Fang Yanping: Student of grade 3 of Guangxi University of the Arts.
- 2) Chen Ying: Student of grade 3 of Guangxi University of the Arts.
- 3) Huang Gongyi: Student of grade 4 of Guangxi University of the Arts.
- 4) Zhang Shuyu: Student of grade 3 of Guangxi University of the Arts.
- 5) Cao Jiaqi: Student of grade 4 of Guangxi University of the Arts.

Research tools

Instruments used in the study of "A study of piano techniques of the Goyescas Suite: 1.

Los Requiebros Granados", the researcher has prepared a research tool. By reviewing documents from relevant research, then ask the advisor to check the accuracy and suitability, including.

Data Collection

Researchers have designed data collection procedures for this study. The order of these steps is as follows:

The basic data collection process

- 1) Study basic information about Piano teaching for piano major students from books, articles, journals, and related textbooks from various sources as a basis for the research.
- 2) Search for relevant information, such as the status of Piano teaching, the condition of Piano teaching for piano major students in Nanning, People's Republic of China, etc.



3) Study subjects were selected based on the study objectives. Choose five pianists, five piano teachers and five piano major students of People's Republic of China .Data were collected and interviews were conducted with them.

Data Analysis

The Study of "A study of piano techniques of the Goyescas Suite: 1. Los Requiebros Granados", the researcher has studied information from relevant documents and research. Data was obtained from observations and interviews. were analyzed and discussed. according to the purpose of the research Then present the summarized data and discuss the results in a descriptive analysis (Descriptive Analysis). The researcher has analyzed and presented the data according to the following goals. Use IOC to conduct statistical analysis on the questions in the interview questionnaire. Conduct text analysis on the data obtained from the interviews with the research subjects, and determine the research data needed for the research. Combining with the research data, through analysis of the problems of the status of Piano teaching for children with autism in Chengdu, People's Republic of China, develop the guidelines.

Results

According to the purpose of the study, the results are as follows:

1. The researcher reached the following conclusions through the study of relevant literature about Goyescas Suite: 1. Los Requiebros Granados.

Emotional expression plays a crucial role in performing "Goyescas Suite: 1. Los Requiebros Granados" as the piece is filled with delicate emotions that students must deeply understand to convey authentically to the audience. The emotional expression involves not only changes in timbre but also the performer's emotional experience and the transmission of emotions, recommending methods such as in-depth musical analysis, immersive emotional experience, role-playing, emotional communication, and integrating personal emotions. Additionally,



timbre control techniques are essential, stressing the need for soft and bright timbre achieved through refined sound control techniques like wrist flexibility and finger pressure control to ensure clear notes and pure timbre. Moreover, rhythmic practice is crucial, the importance of students accurately grasping the piece's rhythm to naturally express its fluidity and inner rhythm through rhythmic accuracy.

2. The researcher reached the following conclusions about the piano techniques of the Goyescas Suite: 1. Los Requiebros Granados through interviews with experts and teachers.

Figure 1 2 experts and 3 piano teachers: Li Songkun, Wu Lingcao, Pang Lulu, Chen Shuguang and Xia Lu.



2.1 Li Songkun (2024.12.1) It has been maintained that the piano performance techniques in "the Goyescas Suite: 1. Los Requiebros "include four key aspects: emotional expression, solving fast running techniques, highlighting the melodic line, and applying the correct strength. Emotional expression requires students to deeply understand the piece's background and emotional content, enhancing empathy through research on the composer and the creative environment. Fast running techniques demand finger flexibility, light touch, and dynamic control, with coordinated wrist and arm movements to maintain even tone quality. Highlighting the melodic line involves volume contrast, dynamic control, and pedal use to ensure the melody stands out clearly. Applying the correct strength focuses on precise fingertip control, appropriate use of arm weight, and body coordination to enhance the sound's clarity and expressiveness.



By mastering these techniques, performers can achieve rich emotional expression and technical excellence in "the Goyescas Suite: 1. Los Requiebros" (Li Songkun, Interview2024.12.1).



Figure1: Li Songkun

2.2 Wu Lingcao (2024.12.1) It has been maintained that when we performing Granados' "Los Requiebros," showcasing Spanish folk rhythms and rhythmic patterns, along with the proper use of rubato, is essential. The characteristics of Spanish folk rhythms, with their strong national style, are conveyed through irregular accents, ornaments, and rhythmic counterpoint, bringing energy and dynamism to the music. Performers must master these traditional rhythmic elements to enhance the expressiveness and depth of the piece. The use of rubato, through subtle stretching and compressing of the rhythm, heightens emotional fluctuations and highlights the unique charm of the Romantic style. These techniques help performers effectively convey the emotional tension and national essence embedded in the music (Wu Lingcao, Interview2024.12.1).





Figure1: Wu Lingcao

2.3) Pang Lulu (2024.11.19) Through the interview, we learned that scientific time management, a reasonable practice plan, and psychological adjustment can help students improve their practice efficiency and achieve better learning results. (Pang Lulu, Interview2024.11.19)



Figure1: Pang Lulu



2.4) Chen Shuguang (2 0 2 4 .11.19) Innovative teaching methods can make practice more engaging. Gamifying the practice process, such as using timers to track practice time or setting small challenges, can make practice more enjoyable. Utilizing multimedia resources, such as video tutorials and music software, can also enrich practice methods, capture students' attention, and improve learning outcomes (Chen Shuguang, Interview2024.11.19).



Figure 1: Chen Shuguang

2.5) Xia Lu (2024.11.20) Helping students overcome performance nervousness requires a combination of mental preparation, solid performance skills, stage experience, emotional support, and practical strategies. By encouraging positive thinking, simulating real performance environments, teaching relaxation techniques, and ensuring thorough preparation, teachers can build students' confidence. Accumulating stage experience through smaller performances and competitions, alongside providing emotional support, further helps students overcome anxiety. Additionally, familiarizing students with the performance venue and focusing



on the music itself allows them to feel more at ease and perform with greater focus and poise (Xia Lu, Interview2024.11.20).



Figure1: Xia Lu

In summary, the piano performance techniques in "the Goyescas Suite: 1. Los Requiebros" include four key aspects: emotional expression, solving fast running techniques, highlighting the melodic line, and applying the correct strength. Emotional expression requires students to deeply understand the piece's background and emotional content, enhancing empathy through research on the composer and the creative environment. Fast running techniques demand finger flexibility, light touch, and dynamic control, with coordinated wrist and arm movements to maintain even tone quality. Highlighting the melodic line involves volume contrast, dynamic control, and pedal use to ensure the melody stands out clearly. Applying the correct strength focuses on precise fingertip control, appropriate use of arm weight, and body coordination to enhance the sound's clarity and expressiveness. By mastering these techniques, performers can achieve rich emotional expression and technical excellence in " the Goyescas Suite: 1. Los Requiebros ". And we all believe that the key to guiding students in practising piano skills lies in stimulating interest, cultivating habits, and providing structured guidance. By selecting appropriate



pieces, engaging in musical activities, and setting role models, students' interest can be sparked. Establishing fixed practice times, adopting short and frequent practice sessions, and breaking down pieces into sections help develop a regular practice routine. Setting clear goals for each practice, providing timely feedback and encouragement, and keeping track of progress offer students clear direction and sustained motivation. Additionally, teachers and parents need to be patient and supportive, helping students build confidence through setbacks, and scheduling adequate rest to maintain their enthusiasm for music.

Discussion and Conclusion

This study derives its results through literature research and interviews with experts and teachers. According to the research, the experts and teachers all believe that performing "Los Requiebros" requires a multifaceted approach that combines emotional expression, timbre control, rhythmic accuracy, and reflective practice. Cheng Wen believes that students must deeply understand the emotional content of the piece and convey it authentically through in-depth analysis, immersive emotional experiences, and role-playing. (2021,18:22-24) Cao Yang thinks that the mastery of sound control techniques, such as wrist flexibility and finger pressure, is essential for achieving a clear, pure timbre. (2018, 1-32) Zhong Jiayi believes that the accurate rhythm and fluidity are also crucial, ensuring the piece's inner rhythm is naturally expressed. Reflective practice helps students refine their performance through continuous feedback and improvement (2020, 106-108). Additionally, understanding the historical context and mastering basic music theory are key to enhancing musical expression. Successful performances are not only based on technical skills but also on emotional depth, collaboration, and repeated rehearsals. By focusing on these elements, students can improve their interpretation of "Los Requiebros" resulting in more expressive and meaningful performances.



Suggestions

- 1. The research results can be used as a guideline for basic to advanced piano training in the differences playing styles.
 - 2. The research results can be applied to practicing piano playing in other forms.
- 3. The research findings can provide valuable insights for adapting piano techniques to different musical genres and performance settings, enhancing versatility and musical expression.

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The Context of Piano Accompaniment Techniques for music classrooms at Zhengzhou City, People's Republic of China

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Abstract

This research investigates the context of piano improvisation techniques utilized by music teachers in middle school classrooms in Zhengzhou City, People's Republic of China. As the emphasis on music education grows, driven by initiatives for quality education, the role of music teachers becomes increasingly critical in cultivating students' musical literacy. Through a qualitative approach that includes interviews and observations of middle school music educators and experts in the field, the study explores the application, challenges, and effectiveness of piano improvisation as a pedagogical tool.

Findings reveal that while teachers recognize the value of piano improvisation in enhancing classroom atmosphere and student engagement, they often encounter technical challenges related to proficiency, chord arrangement, and modulation. The study underscores the importance of improving teachers' musical skills and theoretical knowledge to maximize the potential of piano improvisation in music education. Ultimately, this research advocates for integrating piano improvisation techniques into middle school curricula to foster a richer educational experience and support students' overall musical development.

Keywords: Piano improvisation techniques, Middle school, Music education, Context



Introduction

Guo Yufeng, Liu Dongyun. (2017: pp. 3) With the continuous development of China's economy and the improvement of people's living standards, there is a growing focus on the transformation of educational quality. The introduction of the "quality education" initiative has shifted the educational model in China from solely emphasizing academic performance to a more balanced approach that equally values moral, intellectual, physical, aesthetic, and labor education. This shift has significantly elevated the status of subjects that were previously underappreciated, such as music, art, and physical education, particularly in the case of music education.

As more students, parents, and educators begin to prioritize music education in secondary schools, music courses are no longer seen merely as a form of entertainment amidst students' busy academic schedules. Instead, they are now recognized as foundational to the development of students' musical literacy. This change inevitably places higher demands on secondary school music teachers. The Middle School in Zhengzhou enjoys superior educational resources and faculty compared. In the development of its music curriculum, most of the music teachers at the school are graduates of prestigious 985 and 211 Project universities with degrees in music education, reflecting a high level of teaching expertise. Additionally, the school's music department is well-equipped with essential hardware, including dedicated instrument rooms, pianos, and multimedia audio and video playback equipment. In such a well-established music education environment, the availability of comprehensive teaching tools and a strong educational foundation provides the necessary support for music teachers to incorporate piano improvisation into their teaching methods as an effective tool for enhancing music education.

In such circumstances, teachers use piano improvisation accompaniment for classroom teaching, which is very helpful in improving students' learning progress. Piano improvisation accompaniment also requires a very rich knowledge of music theory and piano skills.

Wang Yanxiu. (2017: pp.10) As discussed earlier, piano improvisation can be categorized into melodic and non-melodic improvisation. Both forms play a significant role in achieving the



objectives of secondary school music education. First and foremost, one of the key goals of secondary school music education is to cultivate students' basic musical literacy through listening activities. By using piano improvisation, teachers can perform various musical styles, creating a comparative music education experience. This comparative listening approach allows students to effectively perceive different musical forms and, in the process, gain relevant musical knowledge, serving as an essential foundation for their musical literacy.

Summary, this paper takes middle school music education as the starting point to explore the role and feasibility of piano improvisation accompaniment in middle school music education. Piano improvisation accompaniment is of great significance in middle school music education. It can not only effectively help achieve course objectives but also enhance the classroom atmosphere and help students discover their self-worth. For educational administrators and front-line music educators, it is necessary to update educational concepts, fully realize the importance of piano improvisation accompaniment in middle school music education and strive to improve their own musical literacy and teaching skills. Integrating piano improvisation into middle school music classes can promote the comprehensive development of music education in China.

Objective

To Study the context of Piano improvisation techniques for music classrooms at Zhengzhou City, People's Republic of China.

Conceptual framework

The Current Situation and Status of Piano Improvisation Accompaniment in Middle School Music Classrooms in the People's Republic of China.

Context for Piano Improvisation Accompaniment Instruction in the People's Republic of China.

Research Methodology



The research study entitled "The Context of Piano Improvisation Techniques for music classrooms at Zhengzhou City, People's Republic of China." is qualitative, collecting field data to develop a teaching plan for using piano improvisation accompaniment in middle school music classrooms.

The following steps will be used for the research:

To Study the conditions, problems, and context of Piano improvisation techniques of music teachers' use in music classrooms at Zhengzhou City, People's Republic of China.

Selected as interview subjects: Three music teachers from a middle school in Zhengzhou City, People's Republic of China.

- 1) A Middle School Music Teacher, 6 years of experience in music classroom teaching.
- 2) A Middle School Music Teacher, 10 years of experience in music classroom teaching.
- 3) A Middle School Music Teacher,5 years of experience in music classroom teaching.

Interviews: a piano teacher in university, a piano accompaniment instructor, and a vocal coach were also interviewed.

- 1) A member of the Communist Party of China and holds a Ph.D.
- 2) A steinway young artist, he is a piano teacher at the College of Music, Southwest University, and a Distinguished Associate Professor at Southwest University of Science and Technology.
- 3) A full-time artistic director at the School of Music, Nanjing University of the Arts.

Results

The researcher first interviewed three junior high school music teachers in Zhengzhou. and asked them three questions.

- 1) In middle school music classroom teaching, should piano improvisation accompaniment be used to assist students in learning songs?
 - 2) What technical issues exist in piano improvisation?
- 3) Does using piano improvisation accompaniment in teaching significantly improve the classroom atmosphere and students' enthusiasm for learning?

All three teachers said that they can use piano improvisation accompaniment for teaching, during the teaching process, I encountered these problems: Piano playing proficiency issues, chord



arrangement issues, music modulation issues. Three teachers believe that using piano improvisation accompaniment in teaching has a great positive and improving effect on students' learning and classroom atmosphere.

In addition, we also interviewed experts, and they gave the following suggestions;

Expert 1: When teachers use piano improvisation to assist teaching, it will greatly enhance students' interest in class and create a lively classroom atmosphere. "In music teaching, the proper use of piano for improvisation is more conducive to expressing the musical charm and thoughts and feelings that the music wants to express. The piano has bright timbre, wide range, and clear voice levels. Its diversity and flexibility can fully mobilize students' interest in learning music, fully guide students to use their imagination, and establish a more three-dimensional musical image.

Expert 2: When using piano improvisation accompaniment to assist music teaching, the teacher's piano improvisation accompaniment level is the fundamental factor that determines whether the piano improvisation accompaniment can be maximized in many teaching interactions. Teachers should focus on their own piano playing level training to ensure that they can maximize the level of improvisation accompaniment in class.

Expert 3: As a course, piano improvisation accompaniment has been widely established in various music schools, especially in the teaching of higher normal music majors, and has received more and more attention. Piano is a highly technical instrument. Mastering piano skills is the prerequisite for playing piano improvisation accompaniment well. Therefore, it is necessary to strengthen the training of finger ability, which is necessary to do in daily piano practice, including finger initiative, flexibility and strength training. Make the fingers have the technical ability required for accompaniment, such as arpeggios, scales, chords, octaves, etc. Learners should have a general grasp of the style, form, mode, pitch, etc. of the song. The overall design of the accompaniment is best determined based on these factors. Correct overall analysis of the song can prompt the accompanist to grasp the style of the song, deepen the theme, create an atmosphere,



and enable the audience to understand the meaning of the song. Therefore, it is the most critical step in the entire accompaniment.

The most important thing to be able to improvise and accompany and play is to have a high level of music theory and sight-reading, and to be able to really figure out what you're playing. Assuming the subject has a classical piano background and wants to learn some popular techniques, the researcher uses the familiar song "To Alice" as an example.

If the subject wants to learn to improvise and play, first, when playing a complete piece, not only do you have to read what each note is, but more importantly, you have to know how the chords in the left-hand work with the melody in the right hand. In other words, in order to learn to improvise, you must learn music theory and compositional knowledge. You need to know "why I'm playing this note and not the one next to it" before you play the next key to ensure that the improvisation sounds good and not just random.

Let's look at the above piece and analyze the harmony. In the key of A minor, the first section is a repetition of three chords, Am, E, Am, which are the dominant chord, the dominant chord, and then back to the dominant chord, and the simplest harmony progression, I V I. After the repetition, the chord is passed through the BCD, and the chord is repeated. After this repetition, the melodic connection through the BCD moves to its relationship major, C major, and then after the three chords C, G, Am (I V vi) it goes back to A minor by emphasizing the note E and using it to connect the iii of C major to the V of A minor. If the subject doesn't know these concepts, he won't be able to improvise or adapt this piece, even if he plays it skillfully. Unless it's some particularly fast jazz solo, improvisation doesn't require a lot of finger technique, and I personally think that a piano player with a grade 6 amateur level can start learning improvisation. But improvisation requires a very high level of brain reaction speed and proficiency. Before you play the next note with your right hand, you must calculate in your head what this note will do, will it be used as a note in a chord, or a transition note outside the chord? Before you play the next chord with your left hand, you must figure out in your head what the harmonic properties of the chord



will be, whether it will be in-key or out-of-tune? To improvise at a high level, you need to have a good foundation in music theory and composition. Composition is really the process of recording improvisation. For example, most movie score composers in Hollywood nowadays watch silent movie clips while improvising on the keyboard when they are given a movie, and then record the improvised motives and phrases through arranging software, and then develop them.

In summary, the cultivation of improvisational accompaniment is a gradual process from the shallow to the deep, and it is also a process of continuous exploration and innovation, which requires long-term learning and artistic practice. Only by fully mobilizing students' subjective initiative and creativity, cultivating students' aesthetic, exploratory and innovative abilities, paying attention to the cultivation of students' comprehensive musical abilities, and combining theory with practice can students' ability of improvisational accompaniment be greatly improved. When accompanying singers, they can be like fish in water, better than others, and truly become practical talents who adapt to social needs and have good professional qualities and professional skills.

Discussion and Conclusion

With the development of modern media equipment, images and sounds tend to be saturated in today's public life. Contemporary middle school students can easily enjoy all kinds of popular songs on TV, mobile phones, computers and other music playback devices. In this way, if we still follow the traditional music teaching model and completely copy the songs selected in the textbooks for teaching, the students' interest in class will be eliminated to a certain extent. In such a situation, if teachers use piano improvisation to assist teaching, it will greatly enhance students' interest in class and create a lively classroom atmosphere. "The appropriate use of piano for improvisation accompaniment in music teaching is more helpful to express the musical charm and thoughts and feelings that the music wants to express. The piano has a bright tone, a wide range, and clear voice levels. Its diversity and flexibility can fully mobilize students' interest in learning



music, fully guide students to use their imagination, and establish a more three-dimensional musical image.

From the above questionnaire survey data on middle school music teachers in Zhengzhou, we can see that in the construction of the subject of music, most of the music teachers in Zhengzhou's middle schools graduated from the music normal school of 985 and 211 key engineering colleges and universities, and the teaching level is high; and the hardware facilities for music teaching are also relatively complete. The school has built a special instrument classroom equipped with piano and other instruments as well as multimedia audio and video playback equipment. It can be said that in such a music teaching environment, the complete music teaching aids and excellent school foundation provide the necessary foundation for music teachers to use piano improvisation accompaniment for auxiliary teaching of music subjects.

The researcher used the interview survey method to investigate the application of piano improvisation accompaniment in music teaching by middle school teachers in Zhengzhou. Most teachers use piano improvisation accompaniment for classroom teaching, but in the process of using piano for teaching, they often prepare lessons in advance and arrange the prelude and ending for the song in advance. In addition, some teachers use piano improvisation accompaniment with messy harmony layout, too random connection of voice parts, and relatively simple accompaniment patterns, and some even use only simple accompaniment of fifth or octave, and even interruptions during playing, resulting in a lack of continuity in the song. It is not difficult to find that in the author's survey results on the current situation of music teachers in Zhengzhou using piano improvisation accompaniment to assist music teaching, although Zhengzhou middle schools have invested heavily in the construction of music subjects and have an excellent music teaching environment and school conditions, which provide the necessary foundation for teachers to use piano improvisation accompaniment in music teaching, the effect of teachers using piano improvisation accompaniment in music classes still needs to be improved. Zhang Xia. (2011(7)) explained that although the course on piano improvisational accompaniment is relatively new, it



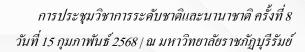
has developed rapidly and has shown significant positive impacts in actual teaching, highlighting its value. From the perspective of content and positioning, piano improvisational accompaniment has already become a comprehensive course that coordinates various musical elements and integrates different teaching methods. As a comprehensive course, it not only serves to improve the level of piano teaching but also acts as a standard for evaluating the outcomes of piano education.

In summary, this is consistent with the viewpoints put forward by the researchers and are of reference value.

Suggestion

Through this study, the researchers came to the following conclusions: Middle school music teachers should strengthen their study of music theory and piano accompaniment skills. Music theory and piano accompaniment skills are the basis for proficient use of piano improvisation accompaniment. Middle school teachers should combine music theory knowledge and harmony knowledge with piano accompaniment finger exercises and playing exercises, and repeatedly strengthen their familiarity with various scales, various modes and transposed chords, and various accompaniment rhythms. Listen to more songs, and in the process cultivate a keen perception of songs and accompaniment forms of different types and styles and apply piano improvisation accompaniment to middle school music education on the premise of comprehensively improving their own music literacy. In classroom teaching, use more piano improvisation accompaniment to lead students to learn to sing songs of different styles to mobilize students' learning enthusiasm and classroom atmosphere.

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A Study on the Current Status of Choral Teaching at Kongcheng Central Primary School in Anging, People's Republic of China

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Abstract

This study explored the current status of chorus teaching in Kongcheng Central Primary School in Anqing City, Anhui Province. Although the school has relatively rich music education resources, it faces problems such as shortage of teachers and lack of teaching materials. Through interviews, questionnaires and classroom observations, the study found that students are enthusiastic about choral activities. The course content includes music theory, vocal training and sight-singing and ear training, aiming to improve students' musical literacy and teamwork ability. However, the effectiveness of choral teaching is limited by the lack of professional teaching materials, aging audio equipment and insufficient teaching resources. Despite this, students made significant progress in their confidence, musical expression, and sense of community. The study recommends strengthening teacher training, seeking more financial support, and working with universities to improve teaching conditions. In short, choral teaching is of great significance to improving students' musical literacy and team spirit, and it is necessary to promote their all-round development by optimizing teaching methods and integrating resources.

Keyword: Choral teaching, Vocal Teaching, Kongcheng Central Primary School.



Introduction

Kongcheng Central Primary School is located in the ancient town of Kongcheng. It was founded in 1906. The school currently has 30 classes and 1,409 students. The college currently has 88 faculty members, including 3 professional music teachers, 3 chorus teaching classrooms, and 40 chorus members. (Kongcheng Central Primary School Charter, 2024, pp.2-3).

In the chorus competition organized by the Municipal Education Bureau, it is common for students in rural primary school choirs to shout out the high notes, which makes the sound monotonous and harsh, resulting in a disharmonious melody and a lack of layering. This situation destroys the coordination of the chorus and makes the chorus lose the moving beauty of children's singing. (Zhou Minxia, 2017, p113).

Teachers should improve teaching effectiveness and stimulate students' interest by teaching choral skills, song selection and providing presentation platforms. Due to limited class hours, it is difficult for teachers to provide individual tutoring, which affects teaching efficiency. (Liu Wei, 2024, pp.162-164).

Although chorus has improved students' musical literacy, self-confidence and teamwork ability and enriched campus cultural life, it also faces problems such as weak teaching staff, few training opportunities, insufficient funds and lack of teaching resources. It is necessary to continuously improve professional quality, overcome difficulties so that rural children can also enjoy the joy of chorus.

Research objectives

To study the current status of teaching choral singing at Kongcheng Central Primary School in Anqing, People's Republic of China.

Research methods

In the study of "To study the current status of teaching choral singing at Kongcheng Central Primary School in Anqing, People's Republic of China", the researchers prepared a research tool. including:



Key Informant

One-on-one interviews were conducted with experts Niu Tianmin and Xu Junlin, school administrators Cheng Bingze and Hu Honghao, choir teachers Ma Dan and Yang Lili, and student parents Zhang Fei, Wu Lei, Zhou Mudan, and Mei Aiyun.

Research tool

For the study " on Current Status of Chorus Teaching in Kongcheng Central Primary School, Anqing City", the researchers prepared research tools, consulted relevant research literature, and guided the teachers to check, including surveys, interviews, and observations.

Data collection

Researchers have designed data collection procedures for this study. The order of these steps is as follows

- Coordination process for conducting research
- Basic data collection process
- Field Data Collection Procedure
- Obtaining the basic data for the study

Data analysis

According to the purpose of this study, the relevant data are summarized and the results are described.

Results

According to the purpose of the study, the results are as follows:



Figure 1

Kongcheng Central Primary School



Teaching resources

The current resource advantage in rural areas is that school leaders attach importance to art education, but there is a lack of professional choral teaching materials.

Division of the Teachers Team

The choir has three teachers. Teacher Ma Dan is good at scientific vocal teaching; Yang Lili has rich knowledge of music theory and experience in sight-singing and ear training. The author Chu occasionally holds local cultural teaching

Course arrangement

The course content includes music theory basics, vocal exercises, breathing control, resonance training, sight-singing and ear training, rhythm imitation, demonstration teaching, group competitions, music games and other interesting methods.



Figure 2

Children are playing cooperative games in the music classroom.



Choral teaching form

1. Group teaching

Gather choir members and explain music theory and vocal skills together

2. Group rehearsal

According to the members' timbre and range, targeted exercises and training of interactive coordination among various parts can enhance the harmony of the chorus.

3. Actual performance Organize members to participate in rural activities, summarize problems after performances, and improve performance capabilities.

Figure 3Teacher Yang leads the choir to compete in Anqing City in 2023.





Student Participation

Since its establishment, the Kongcheng Central Primary School Choral has 40 members, covering grades three to six.

The Kongcheng Central Primary School Choir benefits from strong support for arts education, including well-equipped music classrooms, enthusiastic teachers, and challenges and opportunities for rural students to develop musical skills and confidence.

Discussion and Conclusion

In summary: Under the background of the new curriculum standards, chorus has become indispensable and quite important. Through chorus, we can learn a lot of things, such as singing skills, basic music theory knowledge, appreciation, cooperation and other abilities. In the process of chorus training, teachers are responsible for guiding students to find the beauty of music and enable students to sing music through various teaching methods. This is a beautiful enjoyment for both teachers and students, also conforms to Ge Tingting's research "Joining" to make a sound and ""Singing" wonderfully point of view, Therefore, teachers should adopt scientific training methods according to the characteristics of students' grade, pay attention to the role of teaching materials, and promote students to improve their choral ability through diversified choral training. (Ge Tingting, 2024, pp.44-46).

Suggestions

- 1. Teacher development: regularly organize teachers to participate in professional training, invite experts to the school for guidance, and improve teachers' teaching level. Encourage exchanges and learning with music teachers in urban schools
- 2. Raising funds: Seek support from government special education funds. At the same time, we seek sponsorship from enterprises and social organizations to carry out public welfare crowdfunding activities and expand funding sources.



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The differences in vocal breathing techniques between "then" and "today" during the Bel Canto period

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Abstract

This study aimed to discover the differences in vocal breathing techniques between "then" and "today" during the Bel Canto period. Research instrument study of Bel Canto learning, Educators engaged in Bel Canto teaching and professional Bel Canto singers. Sample: Students, such as university students, Italian and Chinese students, to understand their problems and progress in learning bel canto singing. Teachers: Bel canto teachers with specific teaching experience and professional backgrounds were selected as samples to study their teaching methods and teaching effects. Singers: Selected representative professional bel canto singers as a sample to analyze their singing skills, styles, and expressiveness.

Keyword: Bel Canto period, vocal, breathing techniques

Introduction

Music is a kind of art that can edify people's and rich people's feelings and make people feel another emotion in a state of fatigue. However, the creation of music is equally important. Vocal music is the main composition of music. At present, vocal art in our country is mainly manifested in a hundred flowers blooming and a hundred schools of thought contending with the continuous competition and development of various innovations. In vocal music singing,



Bel canto is a common form of vocal expression. For vocal music art, Bel Canto is a basic singing method with artistic charm and artistic foundation. It is also a classical singing method, which can fully represent and show the art and charm of different timbre, timbre, and resonance. How, in the vocal music sings in the middle better will the Bel canto explanation proper and develops, displays hugely, on the one hand, needs the singer's singing skill to take the support, on the other hand also requires the singer's music accomplishment to take the support. The Bel canto is a representative of vocal music singing; the earliest originated in 17th century Europe; this is a church-style singing style. The Bel canto has already started to become a world-class music that sings the main, must sing the method, has a unique charm in the vocal music, and plays a vital role. The Bel canto has unique characteristics and has always been central in vocal music. The Bel canto is also a noble, ornate way of singing, often performed in some critical performances. So, as a Bel canto, the player should have enough singing ability to improve their singing ability gradually. As singers of Bel Canto, we should train in musical literacy and strengthen our singing ability as the main exercise. (Yang, 2012: pp. 127-128)

For three centuries, these ancient Italian aestheticians have exported exact muscle use, breathing rules, and articulation rules to different parts of the world. These are very different from the vocal breathing techniques, which are generally effective today. Based on a high degree of recognition of the technical rules of vocal music, singers such as Enrico Delle Sedia, Emanuel Garcia, Lilli Lehmann, and later on Enrico Caruso and Luigia Tetrazzini on the one hand, came from the body's innate sensory cognition, on the other the correct usage of muscles. Composers such as Handel, Mozart, Haydn, Bellini, Donizetti, and even Wagner have formed an incredibly brilliant, precious, and valuable high-quality singing force, writing many vocal techniques.

Objectives

To discover the differences in vocal breathing techniques between "then" and "today" during the Bel Canto period.



Research Methodology

- 1. Literature combing method: By searching for relevant materials, we can explore the characteristics of the Italian classical Belcanto school and the Paris Conservatoire school. On the other hand, understand the origin and development of those above two.
- 2. Summarization: Read the existing literature, listen to the audio recordings, watch the video recordings of various singers, and analyze and summarize them to comprehensively explore the historical context of the gradual disappearance of Italian classical Belcanto.
- 3. Experience: Seek solutions that utilize the musical accomplishments and language advantages accumulated by studying abroad over the past ten years while integrating anatomy, medicine, kinematics, and other high-level development fields.
- 4. Educational Experiments: Design teaching experiments to compare the effects of different teaching methods or strategies on students' learning of bel canto singing.

Results

In the Bel Canto tradition, vocal breathing techniques were fundamental to achieving the hallmarks of this style: smooth legato phrasing, effortless agility, sustained long lines, and expressive dynamics. These techniques were based on precise breath control, emphasizing balance, efficiency, and musicality. Below are the primary elements of vocal breathing techniques in Bel Canto singing:

1. Arpeggio The term arpeggio (from the Italian arpeggiate, meaning "to lean") refers to balancing the breath using the coordination of the diaphragm, ribcage, and abdominal muscles.

Technique: Singers were trained to maintain an expanded ribcage throughout the phrase. The diaphragm was controlled to release air gradually and steadily. Abdominal muscles provided gentle resistance to help manage air pressure.

Effect: This allowed for a controlled, even airflow essential for long, legato phrases and subtle dynamic control.

2. Low, Silent Inhalation: Bel Canto singers emphasized a low, silent breath intake, avoiding tension or noise in the throat.

Technique: The breath was taken deeply into the lower lungs, expanding the ribcage and abdomen without raising the shoulders.



The process was smooth and calm, avoiding disruptive sounds or tension that could affect the tone. Effect: This ensured a relaxed sound onset and prepared the singer for optimal control.

3. Economical Breath Use: Breath was treated as a precious resource, and singers were trained to use it sparingly.

Technique: Minimal air was used to produce sound, relying on efficient vocal fold closure (phonation) and precise control of the airflow. Excess breathiness or overuse of air was discouraged, as it could weaken the tone and compromise phrasing.

Effect: This allowed for the seamless execution of long melodic lines (canto spianato) and intricate coloratura passages.

4. Messa di Voce: This exercise was central to developing breath control in the Bel Canto style.

Technique: Singers practiced gradually swelling (crescendo) and diminishing (decrescendo) a single sustained note while maintaining tonal purity and even airflow. This required precise coordination between the breath, larynx, and vocal tract. Effect: It developed dynamic control, expressiveness, and a stable tone across different volumes.

5. Legato Breathing, Breathing was seamlessly integrated into the music to maintain the flowing, lyrical quality of Bel Canto singing.

Technique: Singers avoided abrupt interruptions or audible gasps, timing their breaths to fall naturally at musical rests or within phrases.

The goal was to make breathing part of the musical expression, often imperceptible to the listener. Effect: This supported the continuous, flowing melodic lines that define the Bel Canto style.

6. Phrasing and "Reserving" Breath

Breath control was intricately tied to the musical phrasing, requiring singers to anticipate their breath needs for the length and dynamics of the phrase.

Technique: Singers practiced "reserving" breath by controlling how much air was expelled, especially in longer phrases. This involved careful planning of when and how deeply to inhale. The effect was that it allowed singers to sustain long passages without running out of breath or compromising tone quality.

7. Coordinated Onset: The breath technique directly influenced the initiation of sound (onset).



Technique: A balanced onset requires the breath and vocal folds to coordinate perfectly, avoiding a glottal attack or breathy start. The airflow and sound production began simultaneously, creating a clean, pure tone. Effect: This ensured the singing voice's clarity, beauty, and precision.

In Conclusion, the breathing techniques of Bel Canto were designed to achieve effortless and expressive singing. By mastering the principles of appoggio, economical air use, and seamless phrasing, singers of the era could deliver the virtuosic and emotionally rich performances for which the style is known. These techniques remain influential in classical vocal pedagogy today.

Conclusion and Discussions

The Bel Canto period (circa late 17th to early 19th century) emphasized a highly refined vocal technique rooted in the beauty of tone, agility, and expressivity. Vocal breathing during this era differed in technique and emphasis compared to many modern practices. Here's a breakdown of the differences between "then" (the Bel Canto period) and "today":

1. Breath Management Philosophy

Bel Canto Era: Singers were taught to use "arpeggio" (a technique involving balanced breath support and control through coordination of the diaphragm, ribs, and abdominal muscles). The emphasis was on smooth, uninterrupted airflow, which allowed for seamless legato phrasing and the ability to sustain long, elegant melodic lines. Breath was considered integral to expression, with its control enabling subtle dynamic shifts and nuanced phrasing.

Today: While arpeggio is still taught, modern approaches often incorporate scientific understandings of anatomy and physiology. Contemporary techniques sometimes emphasize power and volume, especially in genres like opera, musical theater, or crossover singing. Focusing on projection to fill large venues or compete with orchestras can lead to a different emphasis on breath strength rather than finesse, as related to McHenry (2015: pp. 89-91). This study was designed to assess the impact of 2 years of operatic training on the acoustic and aerodynamic characteristics of the singing voice. STUDY DESIGN This is a longitudinal study. METHODS Participants were 21 graduate students and 16 undergraduate students. They completed various tasks, including laryngeal video stroboscope, pitch range audio recording, and singing syllable trains at full voice in chest, passaggio, and head registers. Inspiration, intraoral pressure, airflow, and sound pressure level (SPL) were captured during the syllable productions. RESULTS Both



graduate and undergraduate students significantly increased the semitone range and SPL. The contributions to increased SPL were typically increased inspiration, airflow, and reduced laryngeal resistance, although there were individual differences. Two graduate students increased SPL without increased airflow and likely used supraglottal strategies. In this conclusion, Students demonstrated improvements in both the acoustic and aerodynamic components of singing. Increasing SPL primarily through respiratory drive is a healthy strategy and results from intensive training, and also related to Tang (2022: pp.56-58) As we all know, as the soul of music artists, the cultivation of music sense is an indispensable and essential part of Bel Canto teaching. Traditional music classroom education lags behind the development of the information age. According to the educational method of Bel Canto teaching, the recognition experiment of Bel Canto audio is carried out, which helps students analyze the content of music sense contained in music works, and teachers cultivate students' music sense and music theory knowledge according to effective results. In order to better let students, appreciate the true meaning of music, it is necessary to add online tools to assist Bel Canto teaching. Traditional methods neither teach students in accordance with their aptitude from the actual situation, but use the rapidly developing computer technology to match resources, nor does it seriously cultivate students' ability to appreciate music and perceive emotions. Based on the above problems, this paper starts from the field of deep learning and plans to build a hybrid model related to LSTM. The results of this paper are as follows: (1) The CNN-LSTM model has the highest recognition rate curve, and the recognition rate of some emotions is over 90%; the loss rate tends to be stable at 200 iterations, and the convergence speed is rapid. (2) After preprocessing, the emotion recognition rate is higher, and the average accuracy of audio features extracted based on spectrogram + LLDs in emotion is about 0.7. (3) According to the actual scene application, the best effect of music sense cultivation is to use the model to assist classroom teaching, and the highest score can reach 8.8 points. In addition, the error between the emotional expression identified by the model and the original work is between 0 and 0.5 points, and the emotional expression effect is excellent. (4) The model can also recognize different kinds and times of emotion in 5-minute Bel Canto works. The above experimental results show that the model basically meets the requirements of the subject, and its performance is excellent, but the details need to be optimized.



Suggestion

Based on the study's findings, the following recommendations are made:

- Explore the written pedagogy and documented breathing practices of the Bel Canto era
 (18th to early 19th century) as taught by composers and vocalists like Manuel García, Nicola
 Vaccai, and Giulio Caccini.
- 2. Identify how societal norms, operatic demands, and performance spaces influenced breathing techniques.
- 3. Compare historical descriptions and methods to modern vocal anatomy and respiratory support understandings.
- 4. Analyze how the repertoire of the Bel Canto period, emphasizing agility, sustained legato, and tonal purity, dictated breathing techniques.
- 5. Compare these requirements to contemporary operatic and non-classical vocal demands, such as increased volume projection and stylistic diversity.
- 6. Examine shifts in vocal pedagogy over time, tracing how Bel Canto principles of breath management have been adapted or replaced in modern vocal training.
- 7. Investigate the influence of technological advances, such as microphones and acoustically designed venues, on breathing techniques.
- 8.Conduct experimental studies comparing modern vocalists trained in traditional Bel Canto breathing techniques to those using contemporary methods.

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The Development of Italian Bel Canto Singing Teaching Manual in Chinese National Opera

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Abstract

Through combing the history of the development of Chinese opera singing art, this paper shows the specific influence of bel canto on Chinese opera singing art and the reasons for its influence by means of examples, quotations, comparisons, induction and reference. Based on the analysis of the reasons why Bel canto has an impact on the art of opera singing in China, this paper focuses on the improvement of the singing skills of Chinese opera singing by Bel canto and the discussion on the nationalization of Bel canto, and takes the personal information of famous singers, relevant music comments, their personal experience in singing and the treatises on opera singing as the arguments, And how to achieve the nationalization of Bel canto in the successful singing of some classical operas and how to draw lessons from Bel canto in traditional opera singing are analysed and summarized in detail. Thus, it demonstrates that Bel canto singing plays an important role in promoting the aesthetic culture, singing skills, development direction and other aspects of China's opera singing art, and puts forward beneficial thinking and inspiration for today's Chinese opera singing art in terms of introduction, reference, development direction and artistic practice, and provides learning clues for more Chinese opera learners and practitioners.

Keyword: Bel canto, Bel Canto Vocal Techniques, Chinese opera



Introduction

Bel canto is a vocal singing form that originated in Italy in the 17th century and has been fully used in the art of opera. Bel canto is a singing method with a complete method system in modern opera art and emphasizes scientific voice training. It has beautiful timbre, rich changes, strict division of parts, emphasis on the unity of sound areas and the use of breath, and has great plasticity of volume. The connection between sound and sound is smooth and even. This singing style has a great influence on vocal music all over the world, and now it has become one of the internationally mainstream singing methods that is loved by the masses. Since Bel Canto was introduced to China in the 1920s and 1930s, it has been gradually integrated with Chinese vocal art, especially in Chinese operas. After decades of development, Bel Canto has been commonly used in Chinese operas. Application, exerting positive artistic value.

At present, China's economic level has improved significantly compared with the past, various cutting-edge information technologies are constantly emerging, and the people's spiritual civilization needs are increasing day by day. Chinese opera singing art should meet the people's changing spiritual needs, absorb international elements, and make Chinese opera The art of singing conforms to the people's aesthetic habits under the new situation. In addition, China's international influence continues to increase and international exchanges become increasingly close. In this era, there is a greater need for musical expressions that are both national and global. Chinese opera art that applies bel canto singing is undoubtedly the first choice. (Ding, 2019: pp1-2)

In recent years, Chinese opera singing artists have gradually paid attention to the use of bel canto singing. However, in practice, problems such as unreasonable style and unclear articulation often occur, resulting in works with Chinese national cultural characteristics unable to be well performed. There is a big difference between Chinese and Italian. In order to be able to speak correctly and accurately, one must pay attention to mastering the unique language styles of each region. Chinese opera performers must strengthen their own learning and training so that they can use it better. Bel Canto provides a better interpretation of national styles. (Zhang, 2021: pp1-2)

In the process of its birth, development and prosperity, Chinese opera singing art has fully learned from and applied the scientific vocal skills of bel canto, inherited the essence of traditional national music elements, introduced international advanced music culture, and shown a diversified development trend. This paper explores the huge impact of bel canto singing on the art of Chinese



opera singing, and deeply analyzes the integration of bel canto singing techniques into Chinese opera singing, in order to explore the development direction of the "bel cantoization" of Chinese opera art.

Research Objective

By reviewing the development history of Chinese opera singing art, this paper explores the influence of Italian Bel Canto techniques on Chinese opera singing.

This study focuses on the enhancement of vocal techniques in Chinese opera singing through bel canto and addresses the issue of the "bel canto-ization" of Chinese opera. It explores the integration and application of bel canto techniques in Chinese opera singing, with the aim of researching and developing a teaching manual for bel canto singing and instruction in Chinese opera.

Significance of the Study

By systematically sorting out the development history of Chinese opera singing art, particularly through an in-depth examination of the integration and application of Italian bel canto in Chinese opera, this research addresses a significant theoretical gap at the intersection of Chinese opera singing art and Western bel canto. The study not only enriches the theoretical framework of Chinese opera singing art but also introduces fresh perspectives and methodologies for comparative research between Chinese and Western vocal traditions.

This study thoroughly investigates the enhancement of Chinese opera singing techniques through bel canto, providing scientifically grounded and systematic technical guidance for Chinese opera performers. By creating a teaching manual for bel canto singing within Chinese opera, the research equips vocal educators and students with practical instructional resources, thereby elevating the overall standard of Chinese opera singing and fostering the art form's standardized development.

Furthermore, this study not only explores the influence of bel canto on Chinese opera singing techniques but also analyses how Chinese opera has cultivated a distinctive artistic style amidst the process of "bel canto-ization." The research offers a theoretical foundation and practical insights to support the innovative evolution of Chinese opera singing art, reinforcing its unique identity and prominence on the global stage of vocal performance.



Methodology

This research is qualitative research, which collects data by observing general conditions by non-participant observation and from the interview Using a structured interview form Therefore, data analysis was used using the Inductive Method, which is to consider similarities. Differences and relationships and present descriptive data for analysis.

The researcher analysis data and Presentation by proceeding as follows:

- 1. Literature review method: By searching for relevant information, on the one hand, we can explore the origin and development of Italian bel canto singing, and sort out the development history of Chinese opera art. On the other hand, by analysing the impact of bel canto on the art of opera singing in my country and the combination of the two, it analyses how to apply bel canto to improve the singing technique of Chinese opera singing.
- 2. Abstract: By reading the existing literature, we use the personal information of famous singers, relevant music reviews and their personal experiences of singing as well as treatises on opera singing as evidence, and discuss how to achieve the nationalization of bel canto and traditional operas in the successful singing of some classic operas. Singing draws on bel canto singing for detailed analysis and induction, and comprehensively explores the application and development of Italian bel canto singing in Chinese opera singing.
- 3.Experience: Use nearly ten years of vocal music teaching experience and experience in opera performance to find solutions for bel canto singing techniques in Chinese operas.
- 4. Educational Experiments: Design teaching experiments to compare the effects of different teaching methods or strategies on students' learning of bel canto singing.

Results

Through the combing of the development history of Chinese opera singing art, the research results show that Italian bel canto has exerted a profound influence on Chinese opera singing art in many aspects, mainly reflected in the following aspects:

1. Aesthetic culture innovation: Italian bel canto mainly with its pure and transparent perfection of pursuit, emphasize the exquisite and sincere expression, the emotion of music aesthetic concept, makes the Chinese opera singer in the expression of the voice and singing skills and emotional transmission level has a higher pursuit, promote the Chinese opera singing art in the



transformation and upgrading of aesthetic level, enhance the emotional resonance and artistic appeal of Chinese opera, promote the Chinese opera art level.

- 2. Changes of singing style: The integration of Italian bel canto singing makes Chinese opera singing skills more mature, and the singers can more accurately interpret the emotions of the characters. At the same time, this integration also strengthens the unique national style of Chinese opera, making it more cultural recognition and artistic competitiveness on the international stage.
- 3. Future development trend: the introduction of Italian bel canto, of a more scientific, systematic and perfect training system for the development of Chinese opera singing art, help to improve the opera learners and practitioners of better musical comprehensive literacy and artistic expression, it has provided strong support for the international development of Chinese opera and singing art.

Conclusion and Discussions

Through the combing of the development process of Chinese opera singing art, we can clearly find the profound influence of Italian bel canto singing on Chinese opera. From the initial introduction of the 20th century, to the nationalization after the founding of new China, to the mature period after the reform and opening up, until the modern transition of the 21st century, Italian bel canto in the evolution of Chinese opera, not only reflects the Chinese opera absorption and western technology, also shows the Chinese opera in the unique path of cultural integration and artistic innovation.

1. Initial Period (1920s): bel canto was introduced into China in the 1920s. At this stage, when Chinese opera initially contacted bel canto, it not only showed the imitation of western technology, but also produced a certain rejection psychology due to the cultural and aesthetic differences. In the early days, Chinese singers tried to develop bel canto into a skill to create new national music and a vocal music art in which they can work together with western music. Composers and singers realized that learning from western singing techniques was to serve Chinese folk music, rather than total westernization, thus opening the exploration of each provincial branch.



- 2. Exploration period (from the founding of the People's Republic of China to the reform and opening up): After the founding of the People's Republic of China, bel canto has entered a new stage of development. Chinese opera creators and singers began to try to use bel canto to combine with traditional Chinese music elements, forming a singing style with Chinese characteristics. At the same time, the teaching and dissemination of bel canto gradually standardizes, which lays a foundation for the maturity of Chinese opera singing art.
- 3. Mature period (after the reform and opening up): After the reform and opening up, bel canto has gradually become one of the main subjects of vocal music teaching in professional music colleges, and has been integrated with the national singing, forming a unique singing style. During this period, a large number of excellent Chinese opera works appeared, such as "Regret for the Past" and "The Wilderness". In terms of singing methods, these works not only borrowed from the techniques of bel canto singing, but also retained the characteristics of Chinese folk music.
- 4. Modern Transition period (since the 21st century): In the 21st century, bel canto has experienced a modern transformation in China, and made remarkable progress in technology, artistic realization, cultural integration and international influence. At this stage, the creation and performance of Chinese opera and artistic songs pay more attention to the compatibility of bel canto singing and Chinese lyrics, as well as the embodiment of Chinese national style. This "reconstruction" identity not only enriches the expression form of bel canto, but also provides new possibilities for the international development of Chinese opera.

Suggestions

Based on the analysis of the development process of Chinese opera singing art and the analysis of the influence of bel canto singing in Chinese opera singing, the following suggestions are proposed to provide more targeted and practical guidance for Chinese opera practitioners and learners:

1. Deepen the basic training of bel canto: practitioners and learners should systematically learn the core skills of bel canto singing, including breathing control, resonance application, timbre adjustment, etc., so as to enhance the stability and expression of sound. Through scientific vocal training, gradually improve the flexibility and control of the voice.



- 2. Integration of national singing characteristics: on the basis of bel canto singing, integrated into the unique skills of Chinese national singing, such as clear pronunciation, smooth tone, timbre embellishment, make the singing more national characteristics and cultural heritage. This fusion not only enriches the singing style, but also enhances the local expression of the works.
- 3. Pay attention to the integration of language and music: in opera singing, special attention should be paid to the language characteristics of Chinese language, and the language and music should be closely combined through scientific vocal methods, so as to improve the natural fluency and emotional appeal of singing. The harmonious unity of language and music is the key to the success of opera singing.
- 4. Enhance the depth of emotional expression: with the help of the exquisite expression of bel canto singing, deeply explore the emotional connotation of opera characters, and enhance the emotional transmission ability of singing. Through the delicate emotional processing, the audience can better feel the inner world of the characters, and enhance the appeal of the performance.
- 5. Strengthen the comprehensive ability of stage performance: on the basis of bel canto singing, further improve the comprehensive ability of stage performance, including body language, expression management, stage positioning, etc. Through a full range of stage performance, enhance the interaction with the audience and the attraction of the performance.
- 6. Continuous practice and reflection optimization: Through a lot of stage practice, continuous reflection and adjustment of singing skills, combined with expert guidance and audience feedback, continuous optimization of singing performance. Practice is an important way to improve the singing level, and reflection is the key to continuous progress.

Through the implementation of the above suggestions, Chinese opera practitioners and learners can better master the skills of bel canto singing, and at the same time, combine with the characteristics of Chinese folk music, improve the singing level, and contribute to the development of Chinese opera.



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A Comparative Study on Adolescents' Knowledge of 3E 2S in Rubber Plantations, Khaen Dong Subdistrict, Khaen Dong District, Buriram Province

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Abstract

This study aimed to compare adolescents' knowledge of 3E 2S in rubber plantations, Khaen Dong Subdistrict, Khaen Dong District, Buriram Province, before and after the experiment. The study employed a quasi-experimental design consisting of two groups: an experimental group of 38 participants and a control group of 38 participants. The sample comprised adolescents aged 15-18 from Khaen Dong Subdistrict, Khaen Dong District, Buriram Province. These adolescents met the following criteria: their parents worked as rubber plantation farmers, and the adolescents had lived in the area for at least five years, voluntarily participated in the research, committed to remaining involved until the study's completion, and actively assisted their parents in rubber plantation farming. Data collection took place between November 2022 and January 2023. Statistics used included mean, percentage, and t-test. The results revealed that the experimental group showed higher knowledge of 3E 2S than the control group before and after the experiment. They could also transfer this knowledge to their parents, enabling them to fully implement 3E 2S. This study recommends the following activities: follow-ups every six months, annual assessments to monitor changes in emotional management among adolescents, and expansion of the program to nearby areas. This strategy can be a foundational initiative in public health problem-solving plans based on age groups and health issues outlined in the healthcare system development plan.

Keyword: adolescent knowledge, adolescents, 3E 2S, rubber plantations



Introduction

Chronic non-communicable diseases are a significant public health problem in all areas. Thai people of all age groups face threats from chronic non-communicable diseases, particularly diabetes, hypertension, cancer, and cardiovascular diseases, which are rapidly increasing. These conditions are primarily caused by undesirable health behaviors, especially risky behaviors associated with 3E 2S (exercise, eating, emotions, smoking, and spirits). These health behaviors, common in daily life, pose significant health risks. It is crucial to modify health behaviors to address these health issues, encouraging people to adopt proper health practices by promoting and developing relevant factors¹ to ensure appropriate management. In this study, the researcher aimed to promote health education for school-age children through training based on the "3E 2S" principles. This approach includes training and promoting adolescent emotional management through peer learning groups among rubber plantation farmers in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province. Therefore, the researcher utilized an evaluation form based on the "3E 2S" principles.²

Research objectives

To compare adolescents' knowledge of 3E 2S in rubber plantations, Khaen Dong Subdistrict, Khaen Dong District, Buriram Province, before and after the experiment.

Hypothesis

After the experiment, adolescents' knowledge of 3E 2S in rubber plantations, Khaen Dong Subdistrict, Khaen Dong District, Buriram Province, is higher than before.

Research Framework

The researcher applied the "3E 2S" principles.

1. General information of school-age children in rubber plantations,
Khaen Dong Subdistrict, Khaen Dong District, Buriram Province,
including gender, age, educational level, and residency in the area

2. Health literacy and health behaviors based on the "3E 2S"
principles, including knowledge and understanding of health
according to 3E 2S



This study employed a quasi-experimental design with two groups: an experimental group of 38 participants and a control group of 38 participants. The sample consisted of adolescents aged 15–18 whose parents worked as rubber plantation farmers in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province. These adolescents had lived in the area for at least 10 years, voluntarily participated in the study, could remain involved until the study's completion, and assisted their parents in rubber plantation farming.

Data were collected between November 2022 and January 2023. Statistical analysis included mean, percentage, and t-test.

Protection of Participants' Rights

This study was approved by the Research Ethics Committee of Buriram Rajabhat University (Certificate No. 020/2564, dated November 25, 2022). Before the study began, the researcher explained the study's objectives, anticipated benefits, research procedures, data collection methods, and the confidentiality of data, which would only be used for this research and presented in an aggregated form. The participants signed informed consent forms before data collection. The researcher prioritized the privacy and autonomy of the participants, respecting their decisions, including the right to withdraw from the study at any time. This study adhered to ethical principles as follows: 1) respect for a person, and 2) beneficence or non-maleficence and justice.

Research Instruments

A 7-item knowledge assessment test was used for pre-and post-testing among adolescents.

Instrument Quality Verification

The 7-item knowledge assessment test for pre- and post-testing among school-aged children was reviewed by three experts, including one nursing instructor and two hospital staff members.



Methodology

This study employed a quasi-experimental design with two groups: an experimental group of 38 participants and a control group of 38 participants. The sample consisted of adolescents aged 15–18 years whose parents worked as rubber plantation farmers in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province. The participants had lived in the area for at least 10 years, voluntarily agreed to participate, could remain in the study until its completion, and assisted their parents with rubber farming activities. Data were collected from November 2022 to January 2023. Statistical analyses included mean, percentage, and t-test.

Data Analysis

Data were analyzed using percentage, mean, and standard deviation. Differences between groups were analyzed using a t-test.

Result

Research Findings

The findings revealed the following:

Table 1Percentage distribution of adolescents in rubber plantations in Khaen Dong Subdistrict, Khaen

Dong District, Buriram Province (n=76).

Data	Quantity	Percentage
Gender		
Male	34	44.74
Female	42	55.26
Age		
8 - 9 years	37	48.68
10 - 12 years	39	51.32
Duration of residency in the area		//
5-8 years	36	47.37
9 years or over	40	52.63



Table 1: The data revealed that among the 76 adolescents in rubber plantations in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province, 34 were male (44.74%) and 42 were female (55.26%). The school-aged children who participated in the study were divided into two age groups: 8–9 years old (37 children, 48.68%) and 10–12 years old (39 children, 51.32%). Regarding the duration of residency in the area, 36 participants (47.37%) had lived there for 5–8 years, while 40 participants (52.63%) had lived there for 9 years or more.

Table 2

Knowledge of the control group before and after the training

Training	n	\bar{x}	S.D.	t-test
Before the training	38	2.58	0.82	6.29
After the training	38	3.55	0.75	

Statistically Significant at the 0.05 Level

Table 2: The findings showed that adolescents' knowledge scores on 3E 2S in rubber plantations in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province, were significantly higher after the training compared to before the training, with statistical significance at the 0.05 level.

Table 3

Knowledge of the experimental group before and after the training

Training	n	\bar{x}	S.D.	t-test
Before the training	38	3.18	0.76	11.39
After the training	38	5.50	0.64	

Statistically Significant at the 0.05 Level

Table 3: The findings indicated that adolescents' knowledge scores on 3E 2S in rubber plantations in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province, were significantly higher after the training compared to before the training, with statistical significance at the 0.05 level.



Table 4

Adolescents' knowledge scores on 3E 2S in rubber plantations in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province: Pre-training comparison between the control and experimental groups

Group	n	$ar{x}$	S.D.	t-test
Experimental group	38	2.59	0.805	0.00
Control group	38	3.39	1.046	

Statistically Significant at the 0.05 Level

Table 4: The findings indicated that adolescents' pre-training knowledge scores on 3E 2S in rubber plantations in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province, did not differ significantly between the control and experimental groups, with no statistical significance at the 0.05 level.

Discussion and Conclusion

Discussion

A comparison of adolescents' knowledge of 3E 2S in rubber plantations in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province, before and after the experiment revealed that the post-experiment knowledge scores were higher than the pre-experiment scores. These findings align with the study conducted by Nathakon Nilnet and Penwipa Nilnet³, which demonstrated that the health literacy scores of working-age individuals significantly improved after implementing a development model (Mdif = 4.176, 95% CI = 3.427–4.925, p-value < 0.001). Similarly, the health behaviors based on the "3E 2S" principles among working-age individuals also showed a statistically significant improvement in scores after implementing the development model (Mdif = 1.892, 95% CI = 1.528–2.255, p-value < 0.001). This finding is consistent with the study by Nattawut Kokkrathok and Chollada Ngonsamrong⁴, which found that village health volunteers demonstrated significantly higher average scores in health literacy based on the "3E 2S" principles across all six dimensions, as well as improved health behaviors after the experiment, with statistical significance at p-value < 0.05. This study highlights that health literacy based on the "3E 2S" principles significantly improves health behaviors among village



health volunteers. This finding aligns with the study by Songdhasn Chinapong, Phattharit Damsen, Nantharat Srisawat, and Paitoon Phothisaan⁵, which revealed that physical education and sports science students at North Bangkok University exhibited a good overall level of health literacy based on the "3E 2S" principles ($\bar{x} = 71.4$). The chi-square test in this study revealed a statistically significant relationship at the 0.05 level between health literacy and the perception of health care practices based on the "3E 2S" principles. This result is consistent with the findings of Khanidtha Sratongprom and Sutthisak Suriruk⁶, whose research showed that the average score for health-promoting behaviors based on the "3E 2S" principles among at-risk populations for diabetes and hypertension increased from 2.14 before the experiment to 3.13 after the experiment. When comparing the average scores of health promotion based on the "3E 2S" principles among at-risk populations for diabetes and hypertension before and after the experiment, it was found that the post-experiment scores were significantly higher than the pre-experiment scores (p < 0.05). This finding is consistent with the study by Prakan Khemkhaeng, Nanthaya Onkhong, and Maneerat Wongphum. ⁷ Basic knowledge and understanding showed a statistically significant difference (p-value = 0.00, p < 0.05), with an average score of 7.0 in rural areas, which was higher than the average score of 6.3 in urban areas (out of a total of 10 points). This finding aligns with the study conducted by Chaiya Chakrasingto. 8 The post-experiment scores were significantly higher than the pre-experiment scores, with a p-value = 0.00 (p < 0.05). This result is consistent with the study by Phayao Phongsakchat, Praphaijit Sompee, Atitaya Kaewnoi, and Kanokkan Mekanantawat. Health literacy regarding health behaviors based on local wisdom was positively correlated with health behaviors related to food, exercise, and emotional well-being among nursing students, with statistical significance at the 0.05 level. This finding aligns with the study conducted by Uthai Sudsukh, Theeraporn Sathira-Angkura, Patcharee Kladjomphong, and Bussaba Jaigla. ¹⁰ The comparison of pre- and post-experiment results for the group using the model revealed that the average knowledge score on self-care practices after implementing the model (12.53 points) was significantly higher than before the implementation (10.61 points), with statistical significance (p < 0.05). This finding aligns with the study conducted by Arak Kitikorn. 11 After participating in the program, the experimental and control groups showed statistically significant differences in average scores for health literacy, health behaviors, and body mass index (BMI), with a significance level of (p < .01). This finding aligns with the study conducted by



Chutipa Kaewlue. The sample group exhibited statistically significant differences in the average scores for self-care knowledge, health behaviors based on the "3E 2S" principles, and fasting blood sugar levels before and after participating in the program (p < 0.05). These results, however, do not align with the findings of Atiya Sornkasettrin, Rungnapa Chantra, Rosatikorn Khwanchum, and Ladda Ruangduang whose study reported no significant differences in the average healthcare knowledge scores of village health volunteers before and after implementing a behavior modification program based on the "3E 2S" principles (t = 0.75, p = 0.46).

It can be observed that adolescents' knowledge of 3E 2S in rubber plantations in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province, was higher after the experiment than before. Knowledge of "3E 2S" enables adolescents to apply it in their daily lives and provide guidance to family members. Moreover, this knowledge can serve as a key strategic starting point in public health improvement plans tailored to specific age groups and diseases, addressing issues outlined in the health service system development plan.

Conclusion

A comparison of the knowledge of school-aged children on "3E 2S" in rubber plantations in Khaen Dong Subdistrict, Khaen Dong District, Buriram Province, before and after the experiment revealed that the experimental group had higher post-experiment scores compared to the control group. Additionally, the experimental group demonstrated significant improvement compared to the control group after the experiment. The following activities are recommended: regular follow-up every six months, annual monitoring of emotional management changes among school-aged children, and expansion of the program to nearby areas. Furthermore, this initiative can serve as a key strategic starting point in addressing public health issues based on age groups and diseases, aligning with the goals of the health service system development plan.

Suggestions

This study recommends the following activities: follow-ups every six months, annual assessments to monitor changes in emotional management among adolescents, and expansion of the program to nearby areas. This strategy can be a foundational initiative in public health problem-solving plans based on age groups and health issues outlined in the healthcare system development plan.



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Monk's food and oral health

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Abstract

We study the lifestyle and context of monks in terms of food related to oral health. The study was conducted at Ko Tamyae temple, Kosamphi Sub-district, Kosamphi Nakhon District, Kamphaeng Phet Province by participating in the daily activities of the monks and interviewing monks at other temples in Kosamphi Nakhon District as well. The results of the study found that Ko Tamyae temple has 7 monks with different backgrounds and beliefs. After being ordained, they have different ideas, which blend together, shape their lifestyles and create various oral health phenomena under practices that are consistent with the precepts and general activities of monks, such as giving alms in the morning, eating breakfast, eating lunch, and doing other activities. In addition, the oral health of monks is related to the lifestyle, beliefs, and thoughts of villagers, especially regarding food. Monks must receive food from relatives and laypeople to consume to sustain their lives. Although monks cannot choose their own food, they can choose to eat as appropriate to relieve the suffering of hunger and have the strength to perform their duties as monks. The food that villagers bring to offer to monks depends on the lifestyle in the community and the beliefs in making merit of each villager, which are different. Learning about the oral health of monks has many aspects, such as the lifestyle under different practices of Dharma between Thammayut and Mahanikaya temples, as well as time constraints, which make it impossible to collect comprehensive data. Therefore, further study is necessary.

Keyword: Monk's food, Oral health, Monk, Laypeople



Introduction

The current healthcare system, particularly oral healthcare in Kosamphi Nakhon District, involves various population groups, including Buddhist monks. At present, there is limited health data available for this group. Studying the lifestyle, environment, and health perspectives of monks is crucial for understanding their context and developing future health promotion guidelines.

Monks represent a population group that tends to experience increasing health problems, particularly chronic diseases and oral diseases. These conditions are primarily caused by their consumption patterns. Multiple research studies have found that most monks' consumption behaviors involve nutritionally improper food. Furthermore, monks cannot select their own food and must receive it from laypeople. Currently, most laypeople tend to offer prepared foods to monks, resulting in chronic diseases and oral diseases. Historically, oral diseases in monks may have been attributed to food offerings from devotees, which often contained high sugar content. Frequent consumption combined with inadequate and improper oral hygiene increased their risk of dental caries. Additionally, monks rarely have opportunities to visit dentists, which can lead to oral diseases progressing to tooth loss.

The key group influencing monks' food intake is the lay community surrounding the temple. They often demonstrate food offering behaviors that may be harmful to health and lack knowledge about proper nutrition. This leaves monks with limited dietary choices, as they must consume what is offered, potentially leading to adverse health effects in the future.

Based on this information, we became interested in monks' lifestyles and the relationship between Buddhism and the community. We sought to study and follow their way of life and understand individual monks' perspectives through participation in their daily routines, observing reality from the target group's perspective without preconceived negative bias. Previously, it was assumed that monks would have beliefs and practices different from public health personnel's operational guidelines. Given that monks consume food received from devotees without the opportunity to choose their own food, they cannot control their risk of various diseases, particularly oral diseases. Can individual monks actually choose from the various foods they receive? What are the underlying thoughts and specific practices of each monk regarding their health care? How do they adapt their medical knowledge to fit the monastic context, using it in



conjunction with Buddhist teachings to maintain physical strength and perform their monastic duties?

This study of monks' lives and oral health problems aims to create new experiences that generate integrated thinking processes and methods for managing monks' lifestyles with healthcare. It seeks to learn how to approach this community to reduce disease-oriented thinking or develop oral health service system plans. It aims to identify factors to review and transform new approaches to reaching this population group. The focus is not solely on surveying factors related to oral diseases but on studying monks' way of life, history, daily routines, and the relationship between temples, communities, and villagers. Learning these aspects enables connections to health issues, creating awareness of ongoing situations, understanding the background leading to lifestyle patterns that generate health phenomena, including various contextual factors, before truly understanding the community. Once there is an understanding of the monks' context and lifestyle, this will lead to planning for the development of an oral health service system for monks.

Objectives

To study the lifestyle and environmental context of Buddhist monks regarding dietary patterns in relation to their oral health status and to develop oral healthcare service plans for monks within the designated service area.

Methodology

This study is a qualitative case study approach, examining the lifestyle of Buddhist monks and associated community members at Ko Tamyae temple, Kosamphi Sub-district, Kosamphi Nakhon District, Kamphaeng Phet Province. The study focused on investigating food offerings from community members to monks and the oral health dimensions of community phenomena. Data collection was conducted through field study, including: Observe monks' lifestyle patterns and daily routines. An interview concerning dietary consumption, food selection principles, oral health care concepts, and current oral health care practices. Participatory observation in various activities, including alms rounds, daily meals, Buddhist holy days, and invited meal occasions at various community locations. Data was collected by the researcher in collaboration with public health officials who were familiar with the temple's monks.



Definitions

Monks: Refers to Buddhist monks residing at Ko Tamyae temple, Kosamphi Sub-district, Kosamphi Nakhon District, Kamphaeng Phet Province, and other monks who participated in indepth interviews within Kosamphi Nakhon District, Kamphaeng Phet Province.

Villagers or Laypeople: Refers to community members in surrounding areas who offer alms and food to monks residing at Ko Tamyae temple, Kosamphi Sub-district, Kosamphi Nakhon District, Kamphaeng Phet Province. This includes hosts of various ceremonies who invite monks to perform religious rituals and relevant public health officials within Kosamphi Nakhon District, Kamphaeng Phet Province.

Monk's Food: Refers to food consumed by monks, sourced from various origins including temple kitchens, alms rounds, or direct offerings at the temple.

Oral Health: Refers to oral cavity conditions that contribute to an individual's overall well-being, encompassing physical (functional), mental, and social dimensions. The intellectual dimension affects the perception and interpretation of oral health based on existing oral conditions.

Target Population

The study population comprised seven Buddhist monks residing at Ko Tamyae temple, Kosamphi Sub-district, Kosamphi Nakhon District, Kamphaeng Phet Province, and other monks who participated in in-depth interviews within the service area of Kosamphi Nakhon Hospital, along with three laypeople who were closely associated with the Buddhist monks.

Results

All monks came from diverse backgrounds with different original beliefs. Upon ordination, these beliefs merged with new perspectives, shaping their lifestyles and resulting in varying health phenomena within their religious practices. These practices align with general monastic disciplines and duties, such as morning alms rounds, breakfast, lunch, and other activities. Additionally, monks' oral health status is interconnected with the lifestyle and beliefs of the local community.



Monks must receive alms food from devotees for sustenance. While they cannot choose what food is offered, they can select what to consume as appropriate to alleviate hunger and maintain strength for monastic duties. The food offerings from villagers correlate with community lifestyle patterns and individual merit-making beliefs. From the villagers' perspective, the food they offer is carefully selected as the finest available within their physical, mental, and financial means at that time. They do not consider potential impacts on monks' oral health, while monks can choose what to consume based on their acquired knowledge.

Monks' awareness regarding food selection depends on multiple factors, including their pre-ordination background and ability to perceive or learn from their environment and surrounding media. Elderly monks tend to hold beliefs and practices emphasizing experiences gained through their long lives, trusting in their personal encounters and teachings from traditional senior monks.

Religious beliefs about enduring pain as a practice of patience (Khanti Parami) influence healthcare-seeking behavior. Consequently, monks often seek medical attention only when conditions become severe. For instance, minor dental caries may progress to pulpal involvement before treatment is sought, often resulting in extraction as the only remaining option. This contrasts with younger monks or those more receptive to technological developments or with better access to technology (having means to acquire internet-connected devices). These monks can access more health information through various media, follow mainstream medical practices, adapt to new treatment standards, and seek medical or dental care for minor symptoms, resulting in better treatment outcomes and easier development of health literacy.

Another factor affecting monks' oral health is the presence of devoted attendants or close caretakers around the temple. Monks with familiar lay supporters living near the temple have better access to medical services compared to those ordained elsewhere or who relocated from other areas. Each medical visit requires lay assistance for transportation; without close relationships, monks may hesitate to request help, leading to worsening conditions and poorer treatment outcomes.

Public health officials' perspective reveals limited specific database information for monks, as their data is typically merged into age groups (e.g., novices in school-age groups 8-15 or working-age 15-19 years, monks in working-age 20-59 years or elderly over 60 years). Treatment monitoring is limited to when monks are in their jurisdiction. Treatment continuity is



often disrupted when monks relocate for religious retreats, particularly affecting multi-visit treatments like denture fabrication or root canal therapy.

Discussion and Conclusion

This study is a qualitative case study focusing on the lifestyle of Buddhist monks at Ko Tamyae temple, Kosamphi Sub-district, Kosamphi Nakhon District, Kamphaeng Phet Province, and other monks in the Kosamphi Nakhon District, comprising a total of seven monks, along with three laypeople from the local community involved in the study. The focus of the study is on the food that the community offers to the monks and the oral health aspects arising from the phenomena in the community. Data was collected through field observation, interviews, and participation in various activities occurring in the community.

From the study, it was found that the monks at Ko Tamyae temple have a reasonable understanding of food consumption, enabling them to choose foods that contribute to their health. They mostly consume food received from alms, which includes premade meals, such as curry in bags. Additionally, most foods offered are savory dishes containing coconut milk, highly salty foods, or those that are fried, which do not align with the dietary recommendations from the Nutrition Division, Mahidol University in 2017. Although the monks can choose healthy foods, the majority of the food received from alms tends to be harmful to their physical health and oral health, limiting their options for consumption. This aligns with the study by Sanikhan Srimanee and colleagues in 2013, which examined factors related to the eating behaviors of monks and the food offering behaviors of the community in Phasi Charoen District, Bangkok. It was found that most of the food offered to the monks is highly seasoned, very salty, and very sweet, has a chewy texture, contains high fat, and is mostly prepared by frying. Besides affecting overall physical health, it also impacts oral health, making it easier to develop dental caries.

Most monks have a relatively good attitude towards oral health care and can practice selfcare. They are aware of the ways to access oral health services when necessary or for regular check-ups. However, they hold some misconceptions regarding oral health care, such as believing that as they age, their teeth will naturally fall out on their own, or that they should endure pain and oral diseases because such conditions arise from the deterioration of their physical bodies. Consequently, they often neglect oral health issues until they experience severe tooth pain before



seeking treatment, with tooth extraction being the most common procedure. This is consistent with the study by Thidaporn Busbang and colleagues in 2020, which found that most monks in Phu Wiang District, Khon Kaen Province, had a moderately positive attitude (79.8%), high self-perception regarding their ability to care for their oral health (85.7%), and moderate oral health care behavior (70.2%). However, access to health information and services from healthcare personnel remains quite limited. This finding both aligns with and contradicts the study by Thidaporn Busbang and colleagues in 2020, as an additional difference is that the monks in Kosamphi Nakhon District have regular monthly meetings, providing a channel for disseminating information and educating them about health care and oral health from health officials and dental personnel.

Older monks often exhibit poor oral health care behaviors because they believe that the decline in their oral health is due to aging, leading them to neglect care and allow conditions to worsen. This is aligned with the study by Sanikhan Srimanee and colleagues in 2013, which found that as monks age, they become more susceptible to illnesses due to decreased physical strength, which may lead to chronic health conditions like diabetes and hypertension. Similarly, a study by Sarawit Phajunand and Benja Muktapan in 2015 showed that monks of different ages have varying health-promoting behaviors, with those under 30 exhibiting healthier habits than those over 50. Although older monks may have extensive experiences, they may accumulate incorrect beliefs and have a higher tolerance for pain, resulting in poorer access to health information, leading them to endure health issues rather than address them unless absolutely necessary. This is particularly true for oral health, where monks perceive it as a non-urgent issue that does not threaten life, causing them to only seek dental care when absolutely necessary. This finding aligns with research by Kanisachat Wuttisaksakul in 2018 and Pannathorn Chatchavarat in 2013, which concluded that none of the monks had health-promoting behaviors that met the criteria for overall health, as they generally do not pay attention to their physical well-being. However, the monks' practices, such as meditation, mindfulness, and studying Dharma, can be adapted for health care. Therefore, creating an understanding of holistic health care for monks as presented in the Pali Canon could facilitate effective health promotion for monks and encourage public participation in supporting their health, particularly by fostering a positive attitude towards providing healthy food offerings.



Observations regarding almsgiving and food offerings to monks indicated that community members prefer to make merit through food and beverages, mostly purchasing premade food from shops or markets due to their busy schedules. This finding aligns with the study by Sanikhan Srimanee and colleagues in 2013, which reported that the majority of participants preferred to offer food and drinks (52%) and often bought premade food (53.7%), citing convenience as the main reason for their choices (62.3%). However, an interesting contradiction arises in that the community or laypeople around Ko Tamyae temple often emphasize dedicating merit to their deceased loved ones, while the previous study indicated that many people engage in merit-making primarily for themselves (36%).

Since the food offered to monks largely considers the convenience of the donors, there is a significant amount of food that is detrimental to both physical health and oral health. It is essential to promote health care for monks and increase their knowledge about food choices when offering to monks. This aligns with the recommendations by Thidaporn Busbang and colleagues in 2020, who suggested that health officials should provide proactive health advice, proper attitude adjustments, and health services for the monks. Future research should also investigate the oral health conditions of the sample group to establish the relationship between oral health status and oral health care behaviors. Additionally, experimental research should be conducted on programs that promote positive attitudes, self-efficacy, and the development of oral health care skills for monks, potentially applying self-efficacy theory to evaluate the effectiveness of health promotion programs among monks.

In conclusion, this study suggests that the food monks receive for sustenance to perform religious duties is integrally connected to their holistic health, including oral health. Various factors make oral health promotion among Buddhist monks and novices challenging, requiring familiarity and strong interpersonal skills to achieve effective outcomes. It is hoped that in the future, relevant officials or interested parties will increasingly focus on developing disease prevention and oral health promotion strategies for this population group.



Suggestions and Benefits Gained

Learning about monks' health conditions involves multiple aspects, particularly the different lifestyle practices between the Dharmayut and Mahanikaya lineages. However, limited time has led to insufficient data collection, suggesting that additional research is needed.

Monks are a special group of people who consider themselves superior to the average person, at least according to older monks who believe they hold a higher status. Therefore, when engaging with monks, it is crucial to understand this perspective and approach them appropriately. Failure to do so may lead to resistance, as monks can express opinions across temples and critique the work of officials broadly, which could hinder successful oral health promotion efforts within this group.

Those who can work on promoting both physical and oral health among monks must possess a deep understanding of this group. This includes various personnel such as dentists, dental hygienists, professional nurses, public health officials, or even village health volunteers. This study is qualitative, focusing on lifestyle to understand behaviors that can be applied in planning oral health promotion for monks in the future. The sample size may be small, and there is a lack of quantitative data. Therefore, if a follow-up study is conducted, it may need to include quantitative data to enhance the reliability of the information.

The findings from this study have led to the development of an oral health promotion plan specifically for monks, which includes the following:

- 1. Establish a network of stakeholders involved in the health care of monks, encompassing both physical and oral health. This includes officials from local health promotion hospitals, village health volunteers, village leaders, and local community members involved in offering food to monks.
- 2. Educate nearby residents about selecting appropriate foods to offer monks to promote their health.
- 3. Provide knowledge to monks on how to choose nutritious foods for their physical and oral health. Even though community members may offer food based on their circumstances, monks should at least possess the skills to select foods that are beneficial to their health or that have minimal adverse effects.



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Developing an Age-Friendly Environment to Promote Interprofessional Education: A Pilot Study

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Abstract

This study focuses on designing an age-friendly environment to promote interprofessional education (IPE) among students from the Faculty of Nursing and the Faculty of Industrial Technology. The research aimed to develop a multidisciplinary learning model by utilizing the findings from the analysis of elderly care models in Kandong District, Buriram Province, as a framework for the design of teaching and learning management.

The sample consisted of 49 nursing students and 24 students from the Faculty of Industrial Technology. The results revealed that the students reflected positive learning outcomes across various domains, including building relationships with others and understanding the needs of patients. The students also demonstrated improved skills in effective communication and teamwork. The highest reflection was noted in their ability to apply these learnings in the design process. Specifically, the average score for the overall learning outcomes was 3.69 (S.D. = 1.24).

This pilot study serves as a valuable guideline for designing teaching and learning management frameworks that integrate interdisciplinary collaboration. The study highlights the importance of providing students with opportunities to participate in shared learning experiences. By doing so, students not only develop essential skills in teamwork and communication but also engage in the practical application of research findings in real-world contexts, further advancing their professional competencies.



Keyword: Environmental Design, Older Adults, Safe House Prototype, Interprofessional Education (IPE), Pilot Study

Introduction

The world is currently experiencing a significant increase in the aging population. According to the United Nations, the global population of individuals aged 60 and above is expected to reach 1.2 billion by 2025 and 2 billion by 2050. Thailand officially entered an aging society in 2021, with more than 20 percent of its population aged 60 years and older and is projected to become a super-aged society by 2035 (Thai Institute of Aging Research and Development Foundation, 2021). This demographic shift presents numerous challenges, particularly in the realm of elderly care, with a critical focus on ensuring the safety and well-being of older adults. Addressing the needs of this growing population requires comprehensive planning, including the creation of environments that are both physically and socially supportive, to promote independent living and improve quality of life for elderly individuals.

Managing an appropriate environment for the elderly is a critical factor in preventing falls and accidents. A study conducted in Thailand revealed that 30 percent of elderly individuals have experienced a fall at home, with the majority of these incidents attributed to an unsuitable environment (Sutthishai Chittaphankul, 2020). The concept of Universal Design plays a pivotal role in creating environments that are not only safe and accessible for elderly individuals but also convenient for people of all ages and abilities. Universal Design principles emphasize inclusivity by ensuring that the built environment accommodates the diverse needs of users, promoting independence and reducing the risk of accidents (Center for Universal Design, 2020). Adopting these principles in the design of living spaces is essential to improving the quality of life for the elderly and minimizing the risks associated with aging.

Interprofessional Education (IPE) has proven to be an effective approach in developing health professionals by fostering essential skills such as effective communication and problem-solving. Studies by Johnson et al. (2023) and Piwpong et al. (2021) found that students who participated in IPE programs gained a better understanding of the roles of other professions, which enhanced their teamwork abilities. Additionally, there was a statistically significant improvement in their perceived ability and skills for learning in multidisciplinary settings, as well as a more



positive attitude toward organizing and participating in such activities. Furthermore, research by Thompson et al. (2023) demonstrated that collaboration between health and design professionals resulted in a reduction of accidents among the elderly by up to 4 0 percent. These findings underscore the value of interprofessional collaboration in both educational and practical contexts, contributing to safer and more effective healthcare delivery

In the fiscal year 2024, a research team from the Faculty of Nursing, Faculty of Science, and Faculty of Industrial Technology at [University Name] conducted a study analyzing the elderly care system in Kandong District, Buriram Province. The research results highlighted the development of an empowerment model through the creation of an elderly-friendly environment based on the principles of participatory architecture. This approach enabled elderly individuals and their families to utilize the space effectively, increasing awareness of environmental risk factors and significantly improving physical, social, and security performance indices. However, the review revealed that the application of research findings to multidisciplinary teaching and learning management remains limited. While international studies have demonstrated the effectiveness of multidisciplinary learning in developing teamwork skills and integrating knowledge across various professional fields, there is a lack of studies focusing on applying these concepts to develop agefriendly environments within the context of Thai society. Therefore, this study aims to use the results of this research to develop multidisciplinary teaching and learning management for nursing and industrial technology students. The goal is to integrate knowledge from both disciplines and create guidelines for appropriate environmental management for the elderly. This approach is expected to contribute to the sustainable improvement of the quality of life for the elderly in the community.

Objective

To develop a multidisciplinary teaching and learning management model

Research Methodology

This study is pilot action research designed to explore and implement effective strategies for developing an interdisciplinary learning approach in elderly care and environmental design.



Population and Sample Group

The population for this research consists of students from the Faculty of Nursing and the Faculty of Industrial Technology. The sample group includes 49 second-year nursing students and 24 students from the Faculty of Industrial Technology, specifically those enrolled in the Geriatric Nursing Course and the Medium-Scale Architecture Project Detailing Course. These students were selected to participate in the study due to their relevance to the interdisciplinary nature of the research, combining healthcare and architectural design perspectives.

Instrument

The tools used in this research include assessments of multidisciplinary learning abilities and skills, as well as evaluations of satisfaction with teaching and learning management. The assessment of perceptions of abilities and skills in multidisciplinary learning, developed by Ratchanee Pakpong et al. (2021) and adapted from the measurement model of Curran et al. (2011), covers six key areas: 1) Recognition of roles and duties, responsibilities according to professional fields, and respect for other professional fields; 2) Teamwork and leadership; 3) Effective communication; 4) Building relationships with others and accepting the patient's needs; 5) Learning through reflection; and 6) Morality and ethics in areas 1-4. The assessment consists of 28 questions, with responses measured on a 5-point Likert scale ranging from 1 (least) to 5 (most). A low total score indicates limited awareness, while a high total score signifies greater awareness.

Additionally, for items 5-6, there are four open-ended questions. The instrument has an Index of Item Objective Congruence (IOC) value of 0.89 and a Cronbach's Alpha reliability value of 0.98 and 0.83, ensuring strong internal consistency. For interpretation of the mean scores, a criterion by Boonchom Srisaeng (2 0 0 2) was applied, providing a framework for assessing the effectiveness of multidisciplinary learning experiences.

The formula for the range interval is as follows: Range interval = (Maximum score – Minimum score) / Number of classes The result is 0.75.

- An average of 3.26 4.00 indicates the highest level of perception of ability and skills/satisfaction.
- An average of 2.51 3.25 indicates a high level of perceived ability and skill/satisfaction.



- An average of 1.76 2.50 indicates a low level of perception of competence and skills/satisfaction.
- An average of 1.00 1.75 means a minimum level of perception of competence and skills/satisfaction

The research and data collection are divided into 3 phases as follows:

Phase 1: Course Preparation

In Phase 1, the research team held a meeting with lecturers from the Geriatric Nursing Course (Bachelor of Nursing Program) and the Medium Scale Architecture Outline Course (Bachelor of Science Program in Architectural Technology). The objective was to develop a multidisciplinary learning model. The research findings from the analysis of the elderly care system in Kandong District, Buriram Province, were used as a guiding framework for development. Activities during this phase included preparing the course details, drafting a multidisciplinary learning model that focuses on creating an elderly-friendly environment based on the principles of participatory architecture. The preparation also involved defining learning objectives, designing implementation methods, planning operational activities, and setting up evaluation criteria to ensure the effectiveness of the multidisciplinary learning approach. This phase was crucial in laying the groundwork for integrating knowledge from both nursing and architectural fields to create an inclusive, supportive environment for the elderly.

Phase 2: Implementing a Multidisciplinary Learning Model by Developing an Elderly-Friendly Environment

Phase 2 involves four key activities aimed at developing an elderly-friendly environment through a multidisciplinary learning model. The activities are as follows:

- 1. **Preparation of Students**: The first activity focuses on educating students about providing a safe environment for the elderly. This session lasts 60 minutes and includes team-building activities to foster relationships among students from different disciplines. The students are divided into 6 groups, each consisting of 11-12 members. They are assigned a house design activity, applying the concept of creating an elderly-friendly environment based on the principles of participatory architecture, which takes 120 minutes.
- 2. Assessment of the Health Status and Environmental Survey: The second activity involves assessing the health status and environmental conditions of elderly homes. It takes



3 hours to complete. Six elderly homes are selected through coordination with the Director of Nong Rong Sub-district Health Promoting Hospital, allowing students to perform the activity. Students from the multidisciplinary team assess both the health and environmental conditions of the elderly, recording data in a data collection form.

3. **Analysis of Risk Problems and Drafting Adjustments**: The third activity is conducted outside the classroom as a group activity. It involves analyzing the risk factors of the elderly's environment and drafting adjustments to create a safer living space.

4. Presentation of Health Assessment Results and Environmental Design Adjustments: The fourth activity involves presenting the results of the health assessments and proposed environmental adjustments for the selected elderly homes. This presentation lasts for 3 hours, showcasing the students' findings and design proposals for improving the elderly-friendly environment.

Phase 3: Evaluation of Multidisciplinary Teaching and Learning Management and Reflection

In Phase 3, the evaluation of multidisciplinary teaching and learning management is conducted. This phase includes reflection activities using the assessment of multidisciplinary learning abilities and skills, as well as the satisfaction assessment form for teaching and learning management. The data collection is conducted online via Google Forms.

Data Analysis: The collected data will be analyzed using SPSS version 21, employing descriptive statistics, averages, standard deviations, and content analysis to interpret the findings effectively. This phase is crucial for assessing the effectiveness of the multidisciplinary approach, the development of skills, and the overall satisfaction of students with the teaching and learning process.

Results

The students demonstrated a strong awareness of building relationships with others and recognizing the needs of patients. The area of "relationship with, and recognizing the need of, the patient" had the highest score, with an average of 3.68 (S.D. = 0.52), followed by "effective communication" with a score of 3.67 (S.D. = 0.60), and "teamwork and leadership" at 3.66 (S.D. = 0.59) (Table 1).



Table 1Perception of interprofessional education abilities and skills (n=63)

		Average (S.D.)	Interpretation
1.	Know the roles, duties, and responsibilities according to the	3.55 (0.69)	most
	professional field. Respect for other professions		
2.	Teamwork and Leadership	3.66 (0.59)	most
3.	Communication	3.67 (0.60)	most
4.	Building relationships with others and accepting the needs	3.68 (0.52)	most
	of patients.		

In addition, students also reflected on their perception of abilities and skills in learning with multidisciplinary fields. In terms of morality and ethics, the attitude of other professions, and the acceptance of the views of other professions as correct and equally important (Table 2) are as follows:

Table 2

Reflection on Perception of Multidisciplinary Learning in Moral and Ethics

Issue	Details that students reflect	
The exchange of ideas between	"Sometimes friends may disagree, but they can adjust and accept the	
the two professions and the	perspectives of each profession and work together effectively."	
members of the group		
Recognition of the differences in	"Understand the different ideas and different aptitudes in each	
each profession	profession." "Other professional fields may be different from oneself,	
	and you have to accept differences, such as ideas and opinions, which	
	may be wrong and right, and adjust accordingly so that the results will	
	be good." "Understand the work of architecture that needs to be done,	
	the processes and methods used to solve problems or develop the same	
	approach effectively." "Accept opinions and suggestions, accept the	
	opinions of fellow members' decisions."	
Solving problems together	"Different perspectives but exchange information to help each other"	
Principles of collaboration	"Friends have a very good attitude, kindness, and good interpersonal	
	relationships, are thoughtful, well-rounded, and considerate of the safety	



Issue	Details that students reflect	
#	of others."	
Equality of all professions	"All fields and professions have the right working principles and	
	everyone is equal."	
Respect for peers in the same	"Honoring friends in the same profession and different professions with a	
and different professions	human heart"	
Valuing the importance of all	"Any profession we still need to depend on each other."	
professions	"All professions can be integrated together."	
	"Each profession is important and supports each other."	

Learning through reflection or reflection as follows:

The application of knowledge from other professional fields together with the care of service recipients is reflected in the following issues: Safety of the elderly; Toilet Optimization for the Elderly The environment is important for the health of the elderly. Apply the knowledge gained to the environment of the elderly. Adapting the environment for the elderly to their health conditions Taking care of yourself to be healthy Holistic nursing has seen a clearer and more comprehensive picture. Designing an environment that is safe for the elderly It is used to modi fy the house to ask for services. Promotes fall prevention Choosing a tile floor in a house suitable for the elderly It will be used to develop the profession to be more prominent. Adjusting the environment to prevent accidents. Applying knowledge about arranging phonigraphy Allocating budgets for improvement and creating good things for service recipients. Arrangement of environment and facilities to facilitate the daily life of service recipients. Designing the space to be suitable for the elderly Applying health and housing together.

Applying knowledge from other professional fields to their own professions

The concept of the architectural profession has been applied to the care of housing for the elderly. An environment that makes the elderly safe from falling Initial construction of assistive devices for the elderly. Adapting the environment to the service user has a direct impact on health. Bring knowledge to advise service recipients. Arrange a healthy home Selection of materials and equipment that meet the age of the user. Taking care of the environment of patients and the elderly in an appropriate manner in accordance with signs and symptoms, physical health, mental health, and beliefs. Build a suitable house to help patients, be safe, choose materials and equipment that are suitable for the elderly, healthy, and safe. Bring it to the environmental adjustment. Plan and



care about health and the environment. Applying knowledge about environmental applications to adjust what is inappropriate and seen as a problem in the future. To examine the patient's health condition, it is necessary to assess the environment and apply the knowledge of civilizational architecture.

Students are satisfied with the lecturers and the multidisciplinary teaching and learning management model in general. Average 3.69 points (S.D.=1.24) with the top 3 most satisfied with activities to help achieve professional learning objectives Average 4.44 points (S.D.=0.63) Teaching strategies through multidisciplinary collaborative learning help increase learning Average 4.44 points (S.D.=0.71) Lecturers reflected on the performance of the multidisciplinary team Average 4.37 points (S.D.=0.77) (Table 2) Students have suggestions for organizing the next project. It was found that the students reflected that it was a good project, and they wanted to organize activities like this regularly every year.

Table 2
Satisfaction with Lecturers and Multidisciplinary Teaching and Learning Management Model

	satisfaction	Average (S.D.)	Interpretation
1.	Teaching strategies through multidisciplinary		
	collaborative learning help increase learning.	4.44 (0.71)	most
2.	There are enough teachers to supervise.	3.54 (1.07)	very
3.	The instructors are friendly and approachable.	4.22 (0.76)	most
4.	Activities to help achieve professional learning		most
	objectives	4.44 (0.63)	
5.	Ease of seeking advice or assistance from a teacher;	4.29 (0.78)	most
6.	The lecturer reflected on the performance of the		most
	multidisciplinary team.	4.37 (0.77)	
7.	Students know the purpose of learning clearly.	3.46 (1.47)	very
8.	Fun and interesting learning activities	3.39 (1.39)	very
9.	The lecturer gives students the opportunity to ask		very
	questions.	3.46 (1.43)	
10.	Encouraging students to work together as a group/team	3.51 (1.47)	very



	satisfaction	Average (S.D.)	Interpretation
11.	Encouraging students to be creative and critical	3.49 (1.49)	very
12.	Accepting the opinions of students who are different		very
fi	rom the professors.	3.37 (1.39)	
13.	There are many teaching methods (e.g., group work,		very
p	rojects, matchmaking, etc.).	3.44 (1.43)	
14.	Encourage students to research knowledge from		very
li	braries or other sources.	3.41 (1.48)	
15.	Teachers can apply what they teach to social and		very
e	nvironmental conditions.	3.41 (1.43)	
16.	Teachers organize activities to learn from learning		very
S	ources outside the classroom.	3.46 (1.47)	
17.	Students participate in academic evaluations.	3.51 (1.42)	very
18.	The lecturer is attentive to teaching and advising		very
S	tudents on activities.	3.41 (1.40)	
19.	The knowledge from this subject can be put to good		very
u	se.	3.54 (1.47)	
20.	Students learn happily.	3.56 (1.43)	very
	Overall satisfaction	3.69 (1.24)	very

Survey of Homes for the Elderly and Guidelines for Improving the Environment according to Civilized Architecture Guidelines

According to the environmental assessment of the homes and home areas of the elderly, it was found that there was a risk of falling in the most bathrooms. 33.33 percent, followed by different surfaces and untidy storage. 25 percent and insufficient lighting. 16.67 percent, respectively. Students of the multidisciplinary team It is used to prepare guidelines for improving the environment according to the concept of civilization architecture. The details shown in Table 3 are used to draft the concept of renovating a house for the elderly based on the concept of civilized architecture and the budget estimate for home renovation in Figures 1 - 6.



Table 3

Summary of the results of the survey of houses for the elderly and the guidelines for improving the environment according to the guidelines of civilization architecture.

		7.11	
The	Elderly condition	Problems from using the space	Improvement Guidelines
house			
1	A 78-year-old	1. The bathroom has a slippery	1. Pour the floor with tiles, replace
	woman with high	floor, there is damage to the	the roof, attach handrails.
	blood pressure in	sewage pond, door, roof.	Replacing the sewage pond
	the active group	2. kitchen The roof collapsed.	2. Roof extension
	scored 18 points	3. Low roof entrance hall	3. Extend the roof to a higher level.
	on the Barthel	4. Floor level of the entrance	4. Leveling with flooded areas
	ADL Index, and	door to the house. There is a high	and smashed the brick to remove
	there was no risk	masonry that must be overcome.	the barrier.
	of falling.		
2	65-year-old male,	1. There are no handrails in the	1.Repair wall cracks and fill them
	DM HT DLP	bathroom corridor.	with sand mortar.
	Paralyzed, Group	2. No wheelchair for sitting on	2.Lower the toilet sill level.
	Next to Barthel	your chest	3.Use blinds to cover the bathroom
	ADL Index, 11	3. The house is not organized in	area and add handrails to prevent
	points, at risk of	a disorderly manner.	falling. Installing a shower chair
	falling.	4. The environment outside the	4. Attach additional light bulbs to the
		house is a wasteland, covered	ceiling of the bathroom and
		with grass that has not been seen	bedroom.
		and cleaned.	5.Attach a mosquito net to the air
			inlet.
			6. Attach a handrail in the corridor
			from the bedroom to the front of
			the house.
			7. Pour the concrete floor in front of
			the house.

การประชุมวิชาการระดับชาติและนานาชาติ ครั้งที่ 8 วันที่ 15 กุมภาพันธ์ 2568 | ณ มหาวิทยาลัยราชภัฏบุรีรัมย์

The	Elderly condition	Problems from using the space	Improvement Guidelines
house			
3	77-year-old female	1. Inside the house, the furniture	Install the front door, adjust the floor
	with high blood	and chairs are not strong, the living	so that it is not slippery, replace the
	pressure stroke	room is not tidy.	house with a new one, make walls,
	group Barthel	2. The light bulb in the house is	install wooden slats in the new
	ADL Index 10	not bright, the floor of the house is	kitchen.
	points, risk of	mortar, the floor is glossy.	
	falling.	3. The bedroom has dust, the air is	
		not ventilated.	
		4. The bathroom floor is rough,	
		and the toilet is squatting.	
		- The roof has large leaks.	
4	Male 62 years old	1. General conditions in the	1. Adjust the ground There are no
	The active group	house Placing things in disarray,	rubble to make it easier to walk.
	scored 18 points	not enough lighting. Air is not	Pouring concrete
	on the Barthel	ventilated. living room Placing	2. Repair of decayed parts of the
	ADL Index, and	things in disarray. Decayed	kitchen.
	there was no risk	2. Beds. Bedroom: Not enough	3. Attach the light bulb. Add
	of falling.	lighting. There are no windows, no	windows to ventilate the room.
		ventilation, and the stairs are	4. Install a flush toilet. Handrail +
		damaged and unstable. Put things	shower chair installation
		down.	5. Repair the door at the point of
		3. Bathroom There is only one	failure. Install a blind. Attach the
		way to drain the toilet, which is	light bulb.
		through the door. No handrails	6. Replace the roof of a new house.
			7. Repair and rebuild the stairs
			8. Make a drain to drain the water to
			the lower point.
			9.

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The	Elderly condition	Problems from using the space	Improvement Guidelines
house			
5	A 72-year-old	There is no handrail in the corridor	1. Repair wall cracks and fill them
	man, DM HT	to go to the bathroom. The interior	with sand mortar.
	DLP, was bleeding	of the house is covered with	2. Lower the threshold level.
	and narrowed	linoleum. Poor ventilation. The	3. Use a blinds to cover the
	vision, and could	wind could not blow to reach the	bathroom area.
	walk on his own	house. High threshold entrance	4. Added handrails to prevent
	but used a cane to	level.	falling. Installing a shower chair
	help him walk.	There is no light in the bathroom.	5. Attach the light to the ceiling of
	Barthel ADL Index	The floor walks at different levels,	the bathroom.
	10 points at risk of	with rough skin.	6. Move the dining table
	falling.		7. Attach a handrail in the corridor
			from the bedroom to the front of
			the house.
			8. Pour the concrete floor in front or
			the house.
6	A 60-year-old	1. General conditions in the house	1. Divide the room with a smart
	woman with	Placing things in disarray. The	board
	rheumatoid	walls of the house are made of	2. Plastered brick walls, pouring
	arthritis. The	zinc, plywood, vinyl sheets.	concrete floors.
	active group	2. Bedroom combined with	3. Remake the roof hardwood Steel
	scored 19 points in	kitchen Clothes were scattered,	Box
	the Barthel ADL	bedding was in disrepair, and the	4. The walls around the house and
	Index, with no	bathroom was in a dilapidated	the floor are poured with concrete,
	risk of falling.	condition. There is no water	and the rough surface tiles are laid
		supply and electricity. The old	5. Organize things in the house.
		floor is waterlogged.	
		3. The kitchen is not tidy. No	
		security	



Draft a concept for renovating a house for the elderly based on the concept of civilized architecture



Picture 1: Senior House 1

Budget for renovation 26,993 Baht

Picture 2: The second house for the elderly Budget for renovation 9,648 Baht



Picture 3: The 3rd Senior House **Picture**Budget for renovation 44,835 Baht Bu

Picture 4: The 4th Senior House

Budget for renovation 46,334 Baht





Picture 5: The fifth house for the elderly Budget for renovation 14,715 Baht

Picture 6: The 6th Senior House Budget for renovation 49,413 Baht

Discussion and Conclusion

This pilot study aimed to design an age-friendly environment to promote interprofessional education (IPE) among students from the Faculty of Nursing and the Faculty of Industrial Technology. The findings highlight the effectiveness of using a multidisciplinary approach in educating students, particularly in the context of elderly care and environmental design. The students demonstrated positive learning outcomes across various domains such as building relationships with others, understanding patient needs, and developing skills in effective communication and teamwork. The average score of 3.69 (S.D. = 1.24) for overall learning outcomes shows that the approach was well-received by the students (Reich et al., 2020; Baker et al., 2020).

Additionally, the study emphasized the importance of reflection, and the application of knowledge gained from other professional fields. The students reflected on the importance of collaboration and integration of knowledge in creating environments that are safe and supportive for the elderly. The creation of six safe house prototypes based on the principles of participatory architecture further demonstrated the students' ability to apply theoretical knowledge to practical scenarios. This practical application not only enhanced their learning but also contributed to real-world improvements in elderly care environments (Thompson et al., 2023).



The findings from this study support the idea that IPE fosters teamwork, communication, and an understanding of other professionals' roles, which are critical for enhancing care outcomes. It also demonstrates the need for incorporating interdisciplinary collaboration in the development of age-friendly environments. The students' satisfaction with the course, coupled with their ability to apply their learning, highlights the potential for expanding such educational models to enhance professional practices in elderly care and other healthcare-related fields (Cheng et al., 2021).

In conclusion, this study presents a valuable model for integrating IPE into educational programs. It underscores the significance of collaboration among diverse disciplines to address the complex needs of elderly care, ultimately contributing to improved quality of life for the elderly in the community. The positive student feedback and the practical results of this study suggest that it could serve as a foundation for future multidisciplinary initiatives in educational settings (Johnson et al., 2023).

Suggestions

Suggestions for future research and practice include further exploration of the long-term impact of such interdisciplinary learning on students' professional practices and patient outcomes, as well as expanding this model to other sectors of healthcare and social services (Meyer et al., 2019).

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